```
ANSWER 5 OF 2146 CAPLUS COPYRIGHT 2003 ACS on STN
 L24
       1998:776631 CAPLUS
 AN
       130:29071
 DN
 ΤI
       Citric and electrolyte compositions for prevention/retardation
       of hair growth
       Kahale, Laura; Nearn, Malcolm
 IN
       Kahale, Nadim, Australia
 PA
       PCT Int. Appl., 16 pp.
 SO
       CODEN: PIXXD2
 DT
       Patent
 LA
       English
       ICM A61K007-06
 IC
       ICS A61K007-155
· CC
       62-4 (Essential Oils and Cosmetics)
 FAN.CNT 1
       PATENT NO.
                            KIND DATE
                                                      APPLICATION NO. DATE
                           _ _ _ _
                                   _____
                                                      -----
                                                      WO 1998-AU374
 PΙ
       WO 9852515
                            A1
                                   19981126
                                                                           19980520
            W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
           W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG
                                   19981211
                                                      AU 1998-75123
       AU 9875123
                             A1
       AU 727819
                             B2
                                   20001221
       EP 1003465
                                   20000531
                                                      EP 1998-922506
                             A1
                                                                           19980520
                AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                 IE, FI
                                   20010807
                                                      US 1999-424165
       US 6271260
                             B1
                                                                           19991206
 PRAI AU 1997-6902
                             Α
                                   19970520
       WO 1998-AU374
                             W
                                   19980520
 AΒ
       A compn. and method for retarding or preventing hair growth, wherein the
       compn. includes citric acid, an electrolyte, and a cosmetically
       acceptable aq. vehicle which includes a film forming agent. Thus, a
       compn. contained NaCl 3.0, citric acid 10.0, Lipomulse-165 0.5, Amigel
       0.6, propylene glycol 3.0, and water to 100% by wt.
 ST
       hair growth prevention citrate electrolyte; salt citrate hair
       depilatory
 ΙT
       Alcohols, biological studies
       RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
       (Uses)
           (C16-18, ethoxylated, lipocol SC 20; citric and electrolyte
           compns. for prevention/retardation of hair growth)
 ΙT
       Skin preparations (pharmaceutical)
           (astringents; citric and electrolyte compns. for
          prevention/retardation of hair growth)
 IΤ
       Antiperspirants
       Cosmetics
       Deodorants
         Electrolytes
       Emulsifying agents
         Humectants
       Surfactants
       Thickening agents
           (citric and electrolyte compns. for prevention/retardation of
          hair growth)
 ΙT
       Alkali metal salts
       Alkaline earth salts
       Clays, biological studies
       Esters, biological studies
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Paraffin oils
    Polysiloxanes, biological studies
    Proteins, general, biological studies
    Salts, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (citric and electrolyte compns. for prevention/retardation of
        hair growth)
TI
    Cosmetics
        (depilatories; citric and electrolyte compns. for
        prevention/retardation of hair growth)
    Polyoxyalkylenes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (derivs.; citric and electrolyte compns. for
        prevention/retardation of hair growth)
IT
    Cosmetics
        (emollients; citric and electrolyte compns. for
        prevention/retardation of hair growth)
ΙT
    Monoglycerides
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
        (ethoxylated coco, Cetiol HE; citric and electrolyte compns.
        for prevention/retardation of hair growth)
IT
    Castor oil
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (ethoxylated; citric and electrolyte compns. for
        prevention/retardation of hair growth)
    Alcohols, biological studies
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (fatty; citric and electrolyte compns. for
        prevention/retardation of hair growth)
IT
    Hair
        (growth prevention; citric and electrolyte compns. for
        prevention/retardation of hair growth)
    Castor oil
IT
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hydrogenated, ethoxylated, Arlacel 989; citric and electrolyte
        compns. for prevention/retardation of hair growth)
TT
    Alcohols, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (lanolin; citric and electrolyte compns. for
        prevention/retardation of hair growth)
IT
    Cosmetics
        (lotions; citric and electrolyte compns. for .
        prevention/retardation of hair growth)
ΙT
    Gums and Mucilages
        (of sclerotium, amigel; citric and electrolyte compns. for
        prevention/retardation of hair growth)
    56-81-5, 1,2,3-Propanetriol, biological studies
                                                       77-92-9, Citric acid,
   biological studies 110-27-0, Isopropyl myristate 112-92-5, Stearyl
             1327-41-9, Aluminum chlorohydrate
                                                  3687-46-5, Decyl oleate
    7446-70-0, Aluminum chloride, biological studies
                                                        7631-86-9, Silica,
    biological studies
                          7647-14-5, Sodium chloride,
    biological studies
                          8029-05-8, Amerchol L 101
                                                      8050-81-5, Simethicone
    9002-92-0
                9004-98-2
                            9004-99-3, PEG stearate
                                                       9005-12-3, Phenyl
    Dimethicone
                  9005-25-8, Starch, biological studies
                                                           9006-65-9,
                   11099-07-3, Glyceryl stearate
                                                   14807-96-6, Talc, biological
              16958-85-3, Octyl palmitate
                                            25322-68-3D, PEG, derivs.
    31230-04-3, Methylphenylsilanediol homopolymer
                                                      31694-55-0, Liponic EG 1
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36653-82-4, Cetyl alcohol 61711-80-6, Zirconium chlorohydrate
68936-95-8, Tegocare PS 69522-24-3, Arlacel 481 84750-06-1, Arlacel
165
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
(Uses)
 (citric and electrolyte compns. for prevention/retardation of hair growth)

L42 ANSWER 12 OF 19 USPATFULL on STN

DETD

PΙ

The core composition is also ideally suited for the manufacture of a clear antiperspirant composition. A particular advantage of the invention is the formulation of a clear, high viscosity antiperspirant cream using the most effective anti-perspirant active available and at the highest concentration allowed by law which is 20% of aluminum zirconium tetrachlorohydrex gly. The invention, however, is not limited to the use of aluminum zirconium tetrachlorohydrex gly since the more economical but slightly less effective aluminum chlorohydrate can be used. Another advantage of the invention is that urea may be added to the aluminum zirconium complex which further reduces, prevents and heals skin irritation in the high viscosity cream. The preferred range of core components when the core is used as the basis for an antiperspirant is also about 20-40% water, 8-20% cetyl dimethicone copolyol, 10-35% cyclomethicone and about 8-25% of one or more salts. The composition may additionally contain one or more of the additional ingredients mentioned previously and in particular humectants, solvents, emulsifiers, thickeners or masking agents are desireable. In the anti-perspirant composition the humectant may be urea, propylene glycol or both. The salts may be inorganic salts such as one or more of sodium chloride, sodium thiosulfate, alone or in conjunction with antiperspirant actives such as aluminum zirconium tetrachlorohydrex gly or aluminum chlorohydrate. A variety of solvents are desireable particulaly SD-40 alcohol, isopropyl alcohol and other similar alcohols. Preferably the co-emulsifier is methoxy PEG-22 dodecylcopolymer or oleic acid derivatives included therein such as sorbitan oleate or glycyrrhizic acid or its derivatives. A masking agent may be desireable to mask any medicinal odors. Ethylene brassylate, for example, is suitable for this use. US 5162378 19921110

- L48 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1994:697044 CAPLUS
- DN 121:297044
- TI Minimum water activity for the growth of Aeromonas hydrophila as affected by strain, temperature and humectant
- AU Santos, J.; Lopez-Diaz, Teresa-Maria; Garcia-Lopez, Maria-Luisa; Garcia-Fernandez, Maria-Camino; Otero, A.
- CS Veterinary Faculty, University of Leon, Leon, Spain
- SO Letters in Applied Microbiology (1994), 19(2), 76-8 CODEN: LAMIE7; ISSN: 0266-8254
- DT Journal
- LA English
- CC 10-6 (Microbial, Algal, and Fungal Biochemistry)
- AB The influence of water activity (adjusted with three humectants: sodium chloride, glycerol and polyethylene glycol) on the growth of three strains of Aeromonas hydrophila at 28, 10 and 3.8.degree.C was studied. Min. water activity for growth (MWAG) of A. hydrophila varied with strain, temp. and type of humectant. MWAG ranged from 0.940 to 0.973 (28.degree.C), 0.959 to 0.980 (10.degree.C) and 0.975 to 0.980 (3.8.degree.C).
- ST water activity Aeromonas growth temp humectant
- IT Activity
 - Aeromonas hydrophila
 - Humectants
 - Temperature effects, biological
 - $(\min.\ water\ activity\ for\ the\ growth\ of\ Aeromonas\ hydrophila\ as\ affected\ by\ strain,\ temp.\ and\ humectant)$
- IT 56-81-5, Glycerol, biological studies 7647-14-5, Sodium chloride, biological studies 7732-18-5, Water, biological studies 25322-68-3, Polyethylene glycol
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
 - (min. water activity for the growth of Aeromonas hydrophila as affected by strain, temp. and humectant)

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L54 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1962:53865 CAPLUS
DN
     56:53865
OREF 56:10302c-d
     Sodium lactate in cosmetics
TΤ
ΑU
     Barber, A. L.
     Bowmans Chem. Ltd., Wildnes, UK
CS
     Perfumery and Essential Oil Record (1961), 52, 715-20
SO
     CODEN: PEORAA; ISSN: 0369-8998
DT
     Journal
     Unavailable
LA
CC
     40 (Essential Oils and Cosmetics)
     Na lactate (I) is an effective humectant in cosmetic prepns., is generally
AB
     compatible with other cosmetic ingredients, and does not hinder the prepn.
     of stable emulsions. The spreading and emollient qualities of creams and
     lotions prepd. with I are comparable with those obtained with other
     humectants. I in combination with lactic acid serves as a buffer as well
     as a humectant, with moisture loss from such solns. reasonably independent
     of pH. The low cost of I is an advantage. I is not recommended with high
     concns. of soap in aq. soln. Its humectant performance in antiperspirant
     formulations is not good. Hair-set formulations contg.
     poly(vinylpyrrolidone) and I are sensitive to moisture.
IT
     Buffer substances and Buffer systems
        (lactic acid and Na lactate as, in cosmetics)
IT
     Cosmetics
        (sodium lactate as humectant and Na lactate-lactic acid as buffer and
        humectants in)
IT
     Humectants
        (sodium lactate as, in cosmetics)
ΙT
     Hair
        (wave-setting compns. for, Na lactate in)
ΙT
     72-17-3, Sodium lactate
        (as humectants in cosmetics)
ΙT
     50-21-5, Lactic acid
        (buffers and hemectants from Na lactate and, for cosmetics)
IT
     145-13-1, Pregn-5-en-20-one, 3.beta.-hydroxy-
```

(in cosmetics and dermatology)

- = >

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(FILE 'HOME' ENTERED AT 23:27:40 ON 27 JUL 2003)
     FILE 'CAPLUS, SCISEARCH, EMBASE, BIOSIS, USPATFULL' ENTERED AT 23:28:25
     ON 27 JUL 2003
           2321 FILE CAPLUS
L1
            158 FILE SCISEARCH
L_2
            106 FILE EMBASE
L3
            283 FILE BIOSIS
L4
          12843 FILE USPATFULL
L5
     TOTAL FOR ALL FILES
          15711 S HUMECTANT
L6
            565 FILE CAPLUS
L7
             36 FILE SCISEARCH
\Gamma8
L9
             47 FILE EMBASE
L10
             69 FILE BIOSIS
          6068 FILE USPATFULL
L11
     TOTAL FOR ALL FILES
          6785 S SKIN AND L6
L12
L13
            138 FILE CAPLUS
L14
              4 FILE SCISEARCH
L15
             10 FILE EMBASE
L16
              2 FILE BIOSIS
L17
           4749 FILE USPATFULL
     TOTAL FOR ALL FILES
L18
           4903 S L12 AND ((PROPYLENE GLYCOL) OR PG OR (PROPANE-DIOL))
L19
              6 FILE CAPLUS
L20
              0 FILE SCISEARCH
L21
              1 FILE EMBASE
L22
              0 FILE BIOSIS
L23
           2139 FILE USPATFULL
     TOTAL FOR ALL FILES
L24
           2146 S L18 AND ((SODIUM CHLORIDE) OR (SODIUM (3W) CHLORIDE) OR ELECT
L25
            352 FILE CAPLUS
             30 FILE SCISEARCH
L26
L27
             35 FILE EMBASE
L28
             59 FILE BIOSIS
L29
           2005 FILE USPATFULL
     TOTAL FOR ALL FILES
L30
           2481 S HUMECTANT (1S) SKIN
L31
             30 FILE CAPLUS
L32
              3 FILE SCISEARCH
L33
              2 FILE EMBASE
L34
              1 FILE BIOSIS
            558 FILE USPATFULL
L35
     TOTAL FOR ALL FILES
L3<sup>6</sup>
            594 S L30 (1S) ((PROPYLENE GLYCOL) OR PG OR (PROPANE-DIOL))
L37
              1 FILE CAPLUS
L38
              0 FILE SCISEARCH
L39
              0 FILE EMBASE
L40
              0 FILE BIOSIS
L41
             18 FILE USPATFULL
     TOTAL FOR ALL FILES
L42
             19 S L36 (1S) ((SODIUM CHLORIDE) OR (SODIUM (3W) CHLORIDE) OR ELEC
L43
              1 FILE CAPLUS
L44
              0 FILE SCISEARCH
L45
              0 FILE EMBASE
L46
              0 FILE BIOSIS
              0 FILE USPATFULL
L47
     TOTAL FOR ALL FILES
L48
           1 S 1994:697044/AN
L49
              1 FILE CAPLUS
```

L50

0 FILE SCISEARCH

L51 0 FILE EMBASE
L52 0 FILE BIOSIS
L53 0 FILE USPATFULL
TOTAL FOR ALL FILES
L54 1 S 1962:53865/AN

L71 ANSWER 7 OF 7 USPATFULL

ACCESSION NUMBER: 2000:128394 USPATFULL

TITLE: Method for regulating hair growth

INVENTOR(S): Bradbury, Barton James, West Chester, OH, United States

Soper, Shari Joy, Cincinnati, OH, United States

Kaczvinsky, Jr., Joseph Robert, Cincinnati, OH, United

States

Bailey, Dorothy Limerick, Fairfield, OH, United States

Gale, Celeste Dawn, Hamilton, OH, United States

19990601 (60)

PATENT ASSIGNEE(S): The Procter & Gamble Company, Cincinnati, OH, United

States (U.S. corporation)

	NUMBER	KIND DATE
PATENT INFORMATION: APPLICATION INFO.:	US 6124362 US 1999-353408	20000926 19990715
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-93285P US 1999-122925P US 1998-102449P US 1998-102539P US 1998-102458P US 1998-102437P US 1999-136996P US 1999-137024P US 1999-137022P US 1999-137023P US 1999-137052P US 1999-137052P US 1999-137063P	

US 1999-136958P

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Jarvis, William R.A.

ASSISTANT EXAMINER: Kim, Vickie

LEGAL REPRESENTATIVE: Rosnell, Tara M., Hilton, Michael E., Rasser, Jacobus

C.

NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 1662

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Non-limiting examples of penetration enhancers which may be used as optional activity enhancers herein include, for example, 2-methyl propan-2-ol, propan-2-ol, ethyl-2-hydroxypropanoate, hexan-2,5-diol, POE(2) ethyl ether, di(2-hydroxypropyl) ether, pentan-2,4-diol, acetone, POE(2) methyl ether, 2-hydroxypropionic acid, 2-hydroxyoctanoic acid, propan-1-ol, 1,4-dioxane, tetrahydrofuran, butan-1,4-diol, propylene glycol dipelargonate, polyoxypropylene 15 stearyl ether, octyl alcohol, POE ester of oleyl alcohol, oleyl alcohol, lauryl alcohol, dioctyl adipate, dicapryl adipate, di-isopropyl adipate, di-isopropyl sebacate, dibutyl sebacate, diethyl sebacate, dimethyl sebacate, dioctyl sebacate, dibutyl suberate, dioctyl azelate, dibenzyl sebacate, dibutyl phthalate, dibutyl azelate, ethyl myristate, dimethyl azelate, butyl myristate, dibutyl succinate, didecyl phthalate, decyl oleate, ethyl caproate, ethyl salicylate, iso-propyl palmitate, ethyl laurate, 2-ethyl-hexyl pelargonate, iso-propyl isostearate, butyl laurate, benzyl benzoate, butyl benzoate, hexyl laurate, ethyl caprate, ethyl caprylate, butyl stearate, benzyl salicylate, 2-hydroxypropanoic acid, 2-hyroxyoctanoic acid, methylsulfoxide, N,N-dimethyl acetamide,

N,N-dimethyl formamide, 2-pyrrolidone, 1-methyl-2-pyrrolidone, 5-methyl-2-pyrrolidone, 1,5-dimethyl-2-pyrrolidone, 1-ethyl-2-pyrrolidone, phosphine oxides, sugar esters, tetrahydrofurfural alcohol, urea, diethyl-m-toluamide,, 1-dodecylazacyloheptan-2-one and those described in U.S. Pat. No. 5,015,470, issued May 14, 1991 and U.S. Pat. No. 5,496,827, issued Jul. 15, 1994 (both of which are herein incorporated in its entirety by reference).

SUMM

Other classes of optional activity enhancers for use herein include flavinoids, ascomycin derivatives and analogs, histamine antagonists such as diphenhydramine hydrochloride, other triterpenes such as oleanolic acid and ursolic acid and those described in U.S. Pat. No. 5,529,769, JP 10017431, WO 95/35103, U.S. Pat. No. 5,468,888, JP 09067253, WO 92/09262, JP 62093215, U.S. Pat. No. 5,631,282, U.S. Pat. No. 5,679,705, JP 08193094, saponins such as those described in EP 0,558,509 to Bonte et al, published Sep. 8, 1993 and WO 97/01346 to Bonte et al, published Jan. 16, 1997 (both of which are herein incorporated by reference in their entirety), proeoglycanase or glycosaminoglycanase inhibitors such as those described in U.S. Pat. No. 5,015,470, issued May 14, 1991, U.S. Pat. No. 5,300,284, issued Apr. 5, 1994 and U.S. Pat. No. 5,185,325, issued Feb. 9, 1993 (all of which are herein incorporated in their entirety by reference) estrogen agonists and antagonists, pseudoterins, cytokine and growth factor promotors, analogs or inhibitors such as interleukin1 inhibitors, interleukin-6 inhibitors, interleukin-10 promoters, and tumor necrosis factor inhibitors, vitamins such as vitamin D analogs and parathyroid hormone antagonists, Vitamin B12 analogs and panthenol, interfuron agonists and antagonists, hydroxyacids such as those described in U.S. Pat. No. 5,550,158, benzophenones and hydantoin anticonvulsants such as phenytoin.

ANSWER 25 OF 25 USPATFULL on STN L9 90:79885 USPATFULL AN ΤI Formulations of heterocyclic compounds Jones, Trevor M., Sanderstead, England IN White, Alan R., Meopham, England Burroughs Wellcome Co., Research Triangle Park, NC, United States (U.S. PA corporation) PΤ US 4963555 19901016 US 1989-317129 ΑI 19890301 (7) Continuation of Ser. No. US 1986-825956, filed on 4 Feb 1986, now RLI abandoned And a continuation of Ser. No. US 1981-279861, filed on 2 Jul 1981, now abandoned which is a continuation-in-part of Ser. No. US 1980-202339, filed on 30 Oct 1980, now abandoned GB 1980-23645 19800718 PRAI DТ Utility FS Granted LN.CNT 323 INCLM: 514/262.000 INCL NCLM: 514/263.380 NCL IC [5·] ICM: A61K031-52 EXF -514/262 CAS INDEXING IS AVAILABLE FOR THIS PATENT. => d 25 ibib, ab ANSWER 25 OF 25 USPATFULL on STN ACCESSION NUMBER: 90:79885 USPATFULL Formulations of heterocyclic compounds TITLE: INVENTOR(S): Jones, Trevor M., Sanderstead, England White, Alan R., Meopham, England PATENT ASSIGNEE(S): Burroughs Wellcome Co., Research Triangle Park, NC, United States (U.S. corporation) NUMBER KIND DATE US 4963555 PATENT INFORMATION: 19901016 APPLICATION INFO.: US 1989-317129 19890301 (7) RELATED APPLN. INFO.: Continuation of Ser. No. US 1986-825956, filed on 4 Feb 1986, now abandoned And a continuation of Ser. No. US 1981-279861, filed on 2 Jul 1981, now abandoned which is a continuation-in-part of Ser. No. US 1980-202339, filed on 30 Oct 1980, now abandoned NUMBER DATE PRIORITY INFORMATION: GB 1980-23645 - 19800718 DOCUMENT TYPE: Utility FILE SEGMENT: Granted PRIMARY EXAMINER: Goldberg, Jerome D. LEGAL REPRESENTATIVE: Brown, Donald NUMBER OF CLAIMS: 15 EXEMPLARY CLAIM: 1 LINE COUNT: 323 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A topical pharmaceutical formulation for use in treating virus infections of the skin or mucosa and containing 9-(2-hydroxyethoxymethyl) guanine or a salt or ester thereof which comprises a dispersed oil phase and a continuous aqueous phase

containing therein water, at least 30% of a polyhydric alcohol (by

weight of the formulation) and solublized acyclovir.

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ANSWER 1 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     56-81-5, Glycerin, biological studies 67-64-1, Acetone, biological
IT
     studies 107-88-0, 1,3-Butylene glycol 123-86-4, Butyl acetate
     141-78-6, Ethyl acetate, biological studies 7447-40-7, Potassium
     chloride, biological studies 7647-14-5, Sodium
     chloride, biological studies 7786-30-3, Magnesium chloride,
     biological studies 10043-52-4, Calcium chloride, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (two-layer nail enamel removers with emollient and
        moisturizing effect contg. Et or Bu acetate, acetone, electrolytes, and
        polyols)
     PATENT NO.
                       KIND DATE
                                           APPLICATION NO. DATE
                      ____
                                            JP 2001-234286
PΤ
     JP 2003048815
                       A2
                             20030221
                                                              20010801
ΑN
     2003:132323 CAPLUS
     138:158567
DN
L6
     ANSWER 2 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
AΒ
     The effect of selected humectants on sulfosulfuron and glyphosate efficacy
     and sulfosulfuron spray deposit characteristics were studied.
     Humectants were glycerol, sorbitol, ethylene glycol, propylene
     glycol, various polyethylene glycols, sodium lactate,
     and calcium nitrate. Sulfosulfuron was applied to green foxtail and glyphosate to wheat, with and without nonionic surfactants, and with and
     without humectant in distd. water. None of the humectants
     substantially increased glyphosate efficacy, and sodium
     lactate and calcium nitrate were antagonistic. In the presence of
     nonionic surfactant, sodium lactate and calcium nitrate caused the
     greatest increase. . . water) spray deposit. Water retained in sulfosulfuron spray mixt. deposits measured on watch glasses was greater
     with calcium nitrate and sodium lactate than with
     glycerol, sorbitol, propylene glycol or polyethylene glycol
     humectants. These data demonstrate the potential for enhancing
     efficacy of sulfosulfuron by using selected humectants as components of an
     adjuvant.
     50-70-4, Sorbitol, uses 56-81-5, Glycerol, uses 57-55-6, Propylene
IT
     glycol, uses 72-17-3, Sodium lactate 107-21-1,
     Ethylene glycol, uses
                              10124-37-5, Calcium nitrate
                                                             25322-68-3.
     Polyethylene glycol
     RL: MOA (Modifier or additive use); USES (Uses)
        (effect of humectants of sulfosulfuron and glyphosate
        efficacy)
     2002:968421 CAPLUS
AN
DN
     138:149000
     ANSWER 3 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
    56-81-5, Glycerol, uses 67-63-0, Isopropanol, uses 127-08-2, Potassium
              7647-14-5, Sodium chloride, uses
     RL: NUU (Other use, unclassified); USES (Uses)
        (cathodic protection system of reinforced concrete structures with
        thermally-sprayed zinc or zinc alloy anodes using humectant)
     PATENT NO.
                      KIND DATE
                                          APPLICATION NO. DATE
ΡI
     US 6471851
                       Bl
                            20021029
                                            US 1997-839292
                                                              19970417
     US 6033553
                            20000307
                       Α
                                            US 1999-236731
                                                              19990125
     US 6217742
                            20010417
                       В1
                                            US 1999-451173
                                                              19991130
ΑN
     2002:830158 CAPLUS
DN
     137:301301
L6
     ANSWER 4 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
IT
     56-81-5, Glycerol, uses 102-76-1, Triacetin 7647-14-5, Sodium
     chloride, uses 7790-53-6, Potassium polymetaphosphate
```

L6

```
RL: MOA (Modifier or additive use); USES (Uses)
        (humectant in environmentally friendly soap-based pesticides)
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO. DATE
                                           -----
     WO 2001091555
                            20011206
                                          WO 2001-US17243 20010524
PΤ
                      A2
                            20020404
     WO 2001091555
                      Α3
            AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI,
             FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
             MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                      A2 20030219
     EP 1283673
                                          EP 2001-941658 20010524
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US 2003060379
                           20030327
                                           US 2002-288873
                     A1
                                                             20021106
AN
     2001:885633 CAPLUS
DN
     136:1875
     ANSWER 5 OF 357. CAPLUS COPYRIGHT 2003 ACS on STN
Lб
     . . . glycol having av. mol. wt. 200-1000, sorbitol, propylene glycol,
AΒ
     1,3-butylene glycol, glycine betaine, pyrrolidone carboxylic acid or salt,
     maltitol, and sodium lactate as a humectant;
     and one or more of sodium CM-cellulose, starch, denatured starch, quar
     qum, poly(vinyl alc.), and polyacrylamide as a dry paper.
IT
     50-70-4, Sorbitol, uses 56-81-5, 1,2,3-Propanetriol, uses
     1,2-Propanediol, uses 72-17-3, Sodium lactate
              98-79-3D, Pyrrolidone carboxylic acid, salts
                                                              107-43-7, Glycine
               107-88-0, 1,3-Butylene glycol
                                              585-88-6, Maltitol
     59113-36-9, Diglycerol
     RL: MOA (Modifier or additive use); USES (Uses)
        (humectant; water-disintegratable paper having moisture
        retaining property for wipes)
                      KIND DATE
                                           APPLICATION NO. DATE
     PATENT NO.
                      _ - - -
ΡI
     US 5935384
                       Α
                            19990810
                                           US 1997-897653
                                                             19970721
     1999:502704 CAPLUS
AN
DN
     131:131425
     ANSWER 6 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
     50-70-4, Sorbitol, biological studies
                                             7647-14-5, Sodium
     chloride, biological studies
                                    25322-68-3
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
        (specificity of hydrolysis of caseins by lactocepin III from
        Lactococcus lactis subsp. cremoris SK11 in different humectant
        systems contg.)
AN
     1999:433558 CAPLUS
DN
     131:198784
L6
     ANSWER 7 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     50-70-4, Sorbitol, biological studies 56-81-5, 1,2,3-Propanetriol,
     biological studies 57-13-6, Urea, biological studies 72-17-3,
     Sodium lactate 98-79-3 111-29-5, Pentylene glycol 9004-61-9, Hyaluronic acid 9067-32-7, Sodium hyaluronate
                                                                   28874-51-3,
     Sodium L-pyroglutamate 29348-79-6, Pentanediol
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic
     use); BIOL (Biological study); USES (Uses)
        (humectant; skin protection prepn. contg. activated aluminum
        chlorohydrate)
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PATENT NO.
                      KIND DATE
                                              APPLICATION NO. DATE
     ______
                                              ______
     EP 925783
                       A1 19990630
                                             EP 1998-811237 19981216
PΤ
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
                  Α
                              20020415
                                              CH 1997-2884
                                                                 19971216
     1999:425544 CAPLUS
AN
     131:63449
DN
     ANSWER 8 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
     Water-sol. lubricants contg. water-sol. humectants such as
AΒ
     sodium lactate and trimethylglycine and lubricating
     agents such as qum arabic and sodium alginate for condoms and the
     water-sol. lubricant-treated condoms are.
                                         APPLICATION NO. DATE
     PATENT NO. KIND DATE
      _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
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                                              -----
PΙ
     JP 11021230
                       A2
                              19990126
                                             JP 1997-178192
                                                                 19970703
AN
     1999:70165 CAPLUS
DN
     130:130029
     ANSWER 9 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
IT
     50-70-4, Sorbitol, biological studies 56-81-5, Glycerol, biological
               471-34-1, Calcium carbonate, biological studies 497-19-8,
     Sodium carbonate, biological studies 584-08-7, Potassium carbonate
     1305-62-0, Calcium hydroxide, biological studies 1310-73-2, Sodium
     hydroxide, biological studies 7647-14-5, Sodium
     chloride, biological studies
     RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses)
         (prodn. of intermediate moisture foods comprising alkali and
        humectant)
                                              APPLICATION NO. DATE
     PATENT NO.
                       KIND DATE
      -----
     WO 9848644
                       Al 19981105
                                             WO 1998-EP2314 19980420
PΙ
         W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, MI, MR, NE, SN, TD, TG
              CM, GA, GN, ML, MR, NE, SN, TD, TG
     AU 9875274
                       ·A1 19981124
                                             AU 1998-75274
                                                                 19980420 .
ΑN
     1998:739519 CAPLUS
DN
     129:342962
L6
     ANSWER 10 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
IT
     56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,
     biological studies 72-17-3, Sodium lactate
     98-79-3D, Pyrrolidonecarboxylic acid, salts 107-21-1, Ethylene glycol,
     biological studies 107-43-7, Trimethylglycine 676-46-0, Sodium malate
     9000-01-5, Arabic gum 9000-21-9, Furcellaran 9003-03-6, Ammonium
                    9003-04-7, Sodium polyacrylate 9003-39-8, PVP
     polyacrylate
     9004-54-0, Dextran, biological studies 9057-02-7, Pullulan 9063-38-1,
     Sodium starch glycolate 28805-15-4, Ammonium polymethacrylate
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (water-sol. lubricants for condoms contg. sliminess agents and
        penetrating agents and humectants)
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO. DATE
                                              -----
PΙ
     EP 860172
                        A2
                              19980826
                                              EP 1997-122426
                                                                 19971218
     EP 860172
                        A3
                              20000823
     EP 860172
                       B1 20030618
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
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19980707
                                        JP 1996-340909
     JP 10182433
                    A2
                                                        19961220
                                        JP 1997-110521 19970428
     JP 10298060
                    A2 19981110
AN
     1998:585824 CAPLUS
DN
    129:193760
    ANSWER 11 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
1.6
TΤ
    7647-14-5, Sodium chloride, uses
    RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical
    process); PROC (Process); USES (Uses)
       (concrete blocks treated with NaCl: humectants applied to
       cathodic protection systems using conductive paint anode or
       thermally-sprayed zinc or zinc alloy anodes applied to surface of
       reinforced concrete structures)
     PATENT NO. KIND DATE
                                       APPLICATION NO. DATE
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                   ---- -----
                                       -----
                    A1 19980423
    WO 9816670
                                       WO 1997-US18848 19971010
PΤ
        W: AU, CA, US
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                    A1 19980511 AU 1998-50824 19971010
     AU 9850824
     1998:251295 CAPLUS
AN
    129:9984
DN
    ANSWER 12 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
    50-21-5, Lactic acid, uses 72-17-3, Sodium lactate
IT
     98-79-3, Pyrrolidone carboxylic acid 996-31-6, Potassium lactate
     4810-50-8 28874-51-3
     RL: MOA (Modifier or additive use); USES (Uses)
        (humectant; elec. conductive compns. for bioelectrodes with
       low impedance between electrode and skin)
     PATENT NO. KIND DATE
                                    APPLICATION NO. DATE
                   .- - - -
    JP 09038057
PΙ
                     A2
                          19970210
                                       JP 1995-191448 19950727
     JP 3398809
                     B2
                          20030421
    US 5821280
                     Α
                          19981013
                                        US 1996-687920 19960726
ΑN
    1997:262154 CAPLUS
DN
    126:239181
L6
    ANSWER 13 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
IT
    57-13-6, Urea, uses 72-17-3, Sodium lactate
    996-31-6, Potassium lactate 28874-51-3 158091-79-3
    RL: MOA (Modifier or additive use); USES (Uses)
       (humectant-plasticizer; elec. conductive compns. for
       bioelectrodes with low impedance between electrode and skin)
    PATENT NO. KIND DATE
                                 APPLICATION NO. DATE
    JP 09025383 A2
                         19970128
PΤ
                    A2 19970128 JP 1995-174749 19950711
B1 20021217 US 1996-678178 19960711
                                        JP 1995-174749
                                                        19950711
    US 6495627
AN
    1997:218394 CAPLUS
DN
    126:212843
    ANSWER 14 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
    57-13-6, Urea, uses 72-17-3, Sodium lactate
IT
    996-31-6, Potassium lactate 28874-51-3 158091-79-3
    RL: MOA (Modifier or additive use); USES (Uses)
       (humectant agents; elec. conductive compns. for bioelectrodes
       with low impedance between electrode and skin)
    PATENT NO. KIND DATE APPLICATION NO. DATE
                    ---- ------
                    A2
                         19970128
    JP 09024030
                                        JP 1995~174750 19950711
    US 6495627
                    В1
                          20021217
                                       US 1996-678178
                                                        19960711
AN
    1997:218384 CAPLUS
DN
    126:212838
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ANSWER 15 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

L6

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. nutritional, medicinal, therapeutic, oral hygiene and the like
AΒ
     assistance. A taste masking compn. was prepd. by addn. 1 g of
     sodium chloride to 350 g of glycerin as
     humectant with stirring at room temp. Subjects rinsed 30 mL of a
     mouth rinse contg. 3 g benzoic acid/L for a.
IT
     50-70-4, D-Glucitol, biological studies 56-03-1D, Biguanide, derivs.
     56-81-5, 1,2,3-Propanetriol, biological studies 57-55-6,
     1,2-Propanediol, biological studies 65-85-0, Benzoic acid, biological
             144-55-8, Sodium bicarbonate, biological studies
                                                              298-14-6,
     Potassium bicarbonate 497-19-8, Sodium carbonate, biological studies
     584-08-7, Potassium carbonate 7447-40-7, Potassium chloride, biological
     studies 7646-85-7, Zinc chloride, biological studies
                                                          7647-14-5,
     Sodium chloride (NaCl), biological studies 7761-88-8,
     Silver nitrate, biological studies 9000-69-5, Pectins
                                                          16283-36-6, Zinc
     salicylate
               94276-84-3
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (astringent taste-masking compns. comprising humectant and
       salt)
     PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
     _____
                                        -----
PΙ
     WO 9637183
                    A2
                          19961128
                                        WO 1996-US5896
                                                         19960426
     WO 9637183
                    A3
                          19970313
        W: AU, CA, JP
        RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9656688
               A1 19961211
                                   AU 1996-56688 19960426
     1997:67421 CAPLUS
AN
     126:79789
DN
     ANSWER 16 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
     50-21-5D, Lactic acid, salts 56-40-6, Glycine, biological studies
ΙT
     56-41-7, Alanine, biological studies 56-45-1, Serine, biological studies
     72-17-3, Sodium lactate 98-79-3D,
     Pyrrolidonecarboxylic acid, salts
                                      7585-39-9D, .beta.-Cyclodextrin,
     hydroxyalkyl 7585-39-9D, beta.-Cyclodextrin, hydroxypropyl 9004-61-9,
     Hyaluronic acid 9007-28-7, Chondroitin sulfate
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (skin cosmetics contg. natural water with/without humectants)
     PATENT NO. KIND DATE
                                 APPLICATION NO. DATE
                    ----
PΙ
     JP 08231369
                     A2
                          19960910
                                        JP 1995-56594
                                                        19950220
AN
     1996:664901 CAPLUS
DN
     125:284389
L6
    ANSWER 17 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
ΙT
     67-64-1, Acetone, uses 72-17-3; Sodium lactate
     RL: NUU (Other use, unclassified); USES (Uses)
       (in purifn.; prepn. of low-mol.-wt. acetylated hyaluronic acid as
       emollient)
     PATENT NO.
                    KIND DATE
                                        APPLICATION NO. DATE
                                        -----
PΙ
    WO 9605233
                                        WO 1995-JP1613 19950811
                     A1
                          19960222
        W: US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
    JP 08053501
                   A2
                          19960227
                                   JP 1994-210611 19940811
    EP 725083
                     A1
                          19960807
                                        EP 1995-928025
                                                         19950811
    EP 725083
                     В1
                          20011128
        R: DE, FR, GB, IT
                          19970318
    JP 09071602
                   A2
                                        JP 1996-139405
                                                         19960508
    US 5679657
                     A
                          19971021
                                        US 1996-624634
                                                         19960802
    1996:340662 CAPLUS .
AN
DN
    125:18688
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L11 ANSWER 18 OF 106 USPATFULL on STN

Generally, the humectant can be comprised of any material that is able to absorb and retain water, or bind water, such as, for. . . alcohols, certain saccharides, salts and mixtures thereof. Examples of usable alcohols include monohydric alcohols, diols, and/or polyols. More specifically, glycerol, propylene glycol, sorbitol, mannitol, and 1,2-propanediol. Sodium chloride, carboxymethylcellulose, sodium lactate and monosodium glutamate are also useful as humectants or water binders. Salts of any of these humectants or any other type of humectant are also useful. Although some sugars have humectant properties, the sweetness sugar imparts is not desirable in a savory filling. Therefore, it is preferred that the savory filling. . .

PI US 6322829 B1 20011127

L11 ANSWER 29 OF 106 USPATFULL on STN

SUMM Examples of suitable humectants include C.sub.2 to C.sub.4 alkane diols, such as ethane-1,2-diol and its corresponding dimer and trimer, propane-1,2-diol, butane-1,3-diol, or polymers thereof, such as polyethane diol having a molecular weight of up to 10,000 and polypropane diol having a molecular weight of up to 400. Further examples of humectants are "moisturisers" such as sodium pyrrolidone carboxylate, sodium lactate, triethanolamine lactate and sodium chloride.

PI US 4507319 19850326

L11 ANSWER 11 OF 106 USPATFULL on STN

DETD [0049] A preferred humectant for use in the invention is calcium chloride. Examples of other humectants are glycerol, sorbitol, ethylene glycol, PEG, propylene glycol,
1,3 butylene glycol, PCA (2-Pyrrolidone-5-carboxylic acid), sodium sulphate, sodium hydroxide, lactic acid and derivatives, sodium chloride and the like. Those skilled in the art will have no difficulty in selecting suitable humectants having regard to the construction materials in the system and the composition of the filter based on the disclosure herein contained. Some humectants also act as surfactants. One example is sodium dioctylsulphosuccinate.

CLM What is claimed is:

11. A composition according to any one of claims 4 to 10 wherein the humectant is selected from calcium chloride, glycerol, sorbitol, ethylene glycol, PEG, propylene glycol, 1,3 butylene glycol, PCA (2-Pyrrolidone-5-carboxylic acid), sodium sulphate, sodium hydroxide, lactic acid and derivatives thereof, sodium chloride and sodium dioctylsulphosuccinate.

PI US 2003116022 A1 20030626

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ANSWER 18 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
     50-70-4, Sorbitol, biological studies 52-90-4, Cysteine, biological
IT
              56-81-5, Glycerin, biological studies 57-55-6, Propylene
     glycol, biological studies 60-23-1, Cysteamine 60-24-2 67-63-0,
     Isopropanol, biological studies 68-11-1, Thioglycolic acid, biological
             72-17-3, Sodium lactate 79-42-5,
     Thiolactic acid 96-27-5, Thioglycerol 107-21-1, Ethylene glycol,
     biological studies 107-96-0, .beta.-Mercaptopropionic acid 142-26-7,
     N-Acetylethanolamine 504-63-2, 1,3-Propanediol 584-04-3 616-91-1,
     N-Acetyl cysteine 758-08-7, Thioglycolamide 760-30-5 2485-62-3,
     Cysteine methyl ester 3375-50-6, .beta.-Mercapto-ethane sulfonic acid
     3411-58-3, Cysteine ethyl ester 3483-12-3, Dithiothreitol 7631-90-5,
     Sodium bisulfite 7634-42-6 7757-83-7, Sodium sulfite 7773-03-7,
     Potassium bisulfite 10117-38-1, Potassium sulfite 10192-30-0, Ammonium
     bisulfite 10196-04-0, Ammonium sulfite 10593-85-8, Homocysteine
     thiolactone
                   13762-51-1, Potassium borohydride 16940-66-2, Sodium
                   20938-74-3, N-Methyl mercapto-acetamide 21109-95-5, Barium
     borohydride
              24800-44-0, Tripropylene glycol 25265-71-8, Dipropylene glycol
     25265-75-2, Butylene glycol 26691-13-4, 1,3-Dimercapto-2-aminopropane
     28713-50-0, 1-Phenyl-2-mercaptoethanol
                                             30232-12-3, Mercaptopropionic
           37675-88-0 51621-19-3 68148-42-5, Glycerol monothioglycolate
                              89020-07-5
     89020-05-3 89020-06-4
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (combined two-part reducing agent/humectant shaving system
        for improved shaving comfort)
                                            APPLICATION NO. DATE
     PATENT NO.
                     KIND DATE
     . . . . . . . . . . . . . . .
                                            -----
                                           WO 1995-US6011
PI
     WO 9531960
                       Α1
                            19951130
                                                             19950516
         W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ,
             Τ̈́Μ, ΤΤ
         RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE,
             SN, TD, TG
     US 5500210
                       Α
                             19960319
                                            US 1994-247915
                                                              19940523
     ZA 9503797
                       Α
                            19960115
                                            ZA 1995-3797
                                                              19950510
     CA 2190959
                             19951130
                                            CA 1995-2190959
                                                             19950516
                       AΑ
     AU 9524383
                       Α1
                            19951218
                                            AU 1995-24383
                                                              19950516
                                            EP 1995-918438
     EP 760646
                       Α1
                            19970312
                                                              19950516
     EP 760646
                       В1
                            20000105
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
     CN 1149251
                            19970507
                                            CN 1995-193242
                                                              19950516
                       Α
     BR 9507748
                       Α
                             19970819
                                            BR 1995-7748
                                                              19950516
     JP 10500683
                       T2
                             19980120
                                            JP 1995-530345
                                                              19950516
     AT 188372
                       Ε.
                             20000115
                                            AT 1995-918438
                                                              19950516
                       Т3
                                            ES 1995-918438
     ES 2142478
                            20000416
                                                              19950516
     AU 9942386
                       A1
                            19990930
                                            AU_1999-42386
                                                              19990730
AN
     1996:128050 CAPLUS
DN
     124:155671
L6
     ANSWER 19 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
AB
        . . toxin levels 10 to 100 times lower than those of high aw. This
     effect was obsd. using both glycerol or sodium chloride
     as humectants.
\mathbf{N}\mathbf{A}
     1995:790480 CAPLUS
DN
     123:193259
     ANSWER 20 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     50-21-5, Lactic acid, uses 50-70-4, Sorbitol, uses
                                                              56-81-5, Glycerol,
           57-55-6, Propylene glycol, uses
                                             60-35-5D, Acetamide, derivs.
     72-17-3, Sodium lactate 112-27-6, Triethylene glycol
     142-26-7, N-(2-Hydroxyethyl) acetamide 2043-43-8D, Lactamide, derivs.
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56-81-5, Glycerol, biological studies 72-17-3, Sodium
      lactate
      RL: BIOL (Biological study)
         (as humectant, herbicide and fungicide efficacy response to)
      1991:650341 CAPLUS
 ΔN
      115:250341
 DN
      ANSWER 26 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
 L6
      50-70-4, Sorbitol, biological studies 56-40-6, Glycine, biological
 IΤ
      studies 56-81-5, Glycerol, biological studies 57-50-1, Sucrose,
      biological studies 7647-14-5, Sodium chloride,
      biological studies 36675-34-0, Hexaglycerol
      RL: BIOL (Biological study)
         (humectant for food, sorption curves of)
      1988:491430 CAPLUS
 AN
      109:91430
 DN
      ANSWER 27 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN 72-17-3, Sodium lactate 107-88-0, 1,3-Butyleneglycol
L6
 IT
      9004-61-9, Hyaluronic acid 9007-28-7, Chondroitin sulfate
      RL: BIOL (Biological study)
         (humectant, for cosmetic makeups)
      PATENT NO.
                     KIND DATE
                                            APPLICATION NO. DATE
                                            -----
                      ---- -----
      ______
                                                             _____
      JP 62238212
 PΙ
                       A2
                             19871019
                                           JP 1986-82495
                                                             19860410
      JP 07055885
                       В4
                             19950614
      1988:118745 CAPLUS
 ΑN
 DN
      108:118745
      ANSWER 28 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
 L6
      7647-14-5, Sodium chloride, biological studies
 IT
      RL: BIOL (Biological study)
         (humectants improvement of intermediate-moisture beef and
         pork myosin extractability and water activity response to)
 AN
      1988:54609 CAPLUS
      108:54609
 DN
      ANSWER 29 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
 L6
      50-70-4, Sorbitol, biological studies 50-99-7, Glucose, biological
 IT
              56-81-5, Glycerol, biological studies 57-13-6, Urea,
      biological studies 57-48-7, Fructose, biological studies 57-50-1,
      Sucrose, biological studies 57-55-6, Propylene glycol, biological studies 69-79-4, Maltose 72-17-3, Sodium lactate
      142-47-2, Monosodium glutamate
                                     149-87-1, DL-2-Pyrrolidone-5-carboxylic
            25322-68-3, Polyethylene glycol 28874-51-3
      RL: BIOL (Biological study)
         (humectant, for petrolatum-based water-in-oil emulsions, as
         skin moisturizers)
                                            APPLICATION NO. DATE
      PATENT NO.
                     KIND DATE
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 ΡI
      EP 216557
                       A2
                             19870401
                                           EP 1986-306931
                                                             19860909
     EP 216557
                       Α3
                             19870616
         R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
     US 4690774
                             19870901
                       Α
                                           US 1985-774727
                                                             19850911
      ZA 8606241
                       ·A
                             19870429
                                            ZA 1986-6241
                                                             19860819
     AU 8661753
                       A1
                             19870312
                                            AU 1986-61753
                                                             19860822
     JP 62091237
                       A2
                             19870425
                                            JP 1986-210523
                                                             19860905
     BR 8604293
                       Α
                             19870505
                                            BR 1986-4293
                                                             19860908
                       Α
     DK 8604327
                             19870312
                                            DK 1986-4327
                                                             19860910
     NO 8603626
                       Α
                             19870312
                                            NO 1986-3626
                                                             19860910
     NO 171002
                       В
                             19921005
                       C
A
     NO 171002
                            19930113
     CN 86106153
                            19870603
                                            CN 1986-106153
                                                            19860910
     ES 2001671
                       Α6
                            19880601
                                            ES 1986-1744
                                                             19860910
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ΙT

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CA 1283603
                      A1
                           19910430
                                         CA 1986-518024
                                                          19860911
     US 4980084
                     Α
                           19901225
                                         US 1988-253446 19881005
AN
     1987:604934 CAPLUS
DN
     107:204934
L6
     ANSWER 30 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     56-81-5, Glycerin, biological studies 57-55-6, Propylene glycol,
IT
     biological studies 72-17-3, Sodium lactate
     107-21-1, Ethylene glycol, biological studies 73784-63-1
     RL: BIOL (Biological study)
        (humectant, creams contg., water retention capacity of
        stratum corneum in relation to)
AN
     1987:520964 CAPLUS
DN
     107:120964
     ANSWER 31 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
1.6
     57-13-6, Urea, uses and miscellaneous 72-17-3, Sodium
ΤТ
     lactate 97-59-6, Allantoin
     RL: USES (Uses)
        (humectants, for bactericidal hand cleansers)
     PATENT NO. KIND DATE APPLICATION NO. DATE
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                                          ______
     DE 3543918
                     Al 19870619
                                        DE 1985-3543918 19851212
PΙ
     1987:498683 CAPLUS
AN
     107:98683
DN
     ANSWER 32 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L<sub>6</sub>
   Effect of food humectant on lowering water activity of casing
     Kamaboko. 2. Effect of lowering water activity of starch, glycine and
     sodium lactate and prediction of the water activity
     lowering ability of humectants
AN ·
     1982:216247 CAPLUS
DN
     96:216247
L6
     ANSWER 33 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     Effect of food humectants on lowering water activity of fish
ΤI
     paste kamaboko. 1. Water activity lowering effectiveness of sodium chloride, sugars and polyols
     1982:67420 CAPLUS
AN
     96:67420
DN
     ANSWER 34 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
ST
     humectant intermediate moisture beef; meat sucrose humectant; glycerol
     beef humectant; sodium chloride beef humectant
ΑN
     1979:609553 CAPLUS
     91:209553
DN
L6
     ANSWER 35 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
     . . to increase the corneum water content. Measurements of
AB
     extensibility and water holding capacity in isolated animal corneum showed
     that conventional humectants such as glycerol [56-81-5],
     sorbitol [50-70-4] or sodium lactate [72-17-3] can be
     effective but that the effect is lost on rinsing the corneum in water.
     Isolated animal corneum adsorbed. . .
AN
     1975:144823 CAPLUS
DN
     82:144823
L6
     ANSWER 36 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
TΤ
     7647-14-5, Sodium chloride
       (angle of repose of dendritic, humectant effect on)
     PATENT NO. KIND DATE APPLICATION NO. DATE
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PΙ
     BE 624145
                           19630215
                                        BE
AN
     1965:437419 CAPLUS
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63:37419
DN
OREF 63:6640g
     ANSWER 37 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
IT
        (of sodium chloride dendritic crystals, effect of
       coating with humectant on)
IT
    Humectants
       (sodium chloride dendritic crystals coated with,
       angle of repose and)
IT
     7647-14-5, Sodium chloride
       (coating of dendritic crystals of, with humectant, angle of
       repose and)
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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    FR 1354136
                           19640306
                                          FR
PΙ
    BE 624145
                                          ΒE
     GB 1016742
                                         . GB
     1965:64751 CAPLUS
AN
DN
     62:64751
OREF 62:11453e
    ANSWER 38 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
L6
IT
    Cosmetics
        (sodium lactate as humectant and Na
       lactate-lactic acid as buffer and humectants in)
IT
    Humectants
       (sodium lactate as, in cosmetics)
     72-17-3, Sodium lactate
IT
        (as humectants in cosmetics)
AN
     1962:53865 CAPLUS
DN
     56:53865
OREF 56:10302c-d
L6
    ANSWER 39 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN
IT
     Cosmetics
        (sodium lactate as buffering humectant
       for)
IT
     72-17-3, Sodium lactate
        (as cosmetic buffering humectant)
ΑN
     1961:78251 CAPLUS
DN
     55:78251
OREF 55:14830a-b
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9000-69-5, Pectins RL: NUU (Other use, unclassified); USES (Uses) (humectant; in formulation of dust-suppressing compns. contq. humectant) KIND DATE PATENT NO. APPLICATION NO. DATE GB 1994-11372 19940607 ----GB 2279962 A1 19950118 ZA 1994-4253 ZA 9404253 Α 19950508 BR 9402685 Α 19950502 BR 1994-2685 19940712 AU 9467403 AU 1994-67403 19940713 A1 19950127 1995:518893 CAPLUS 122:297775 ANSWER 21 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN The influence of water activity (adjusted with three humectants: sodium chloride, glycerol and polyethylene glycol) on the growth of three strains of Aeromonas hydrophila at 28, 10 and 3.8.degree.C was studied.. 56-81-5, Glycerol, biological studies 7647-14-5, Sodium chloride, biological studies 7732-18-5, Water, biological 25322-68-3, Polyethylene glycol RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study) (min. water activity for the growth of Aeromonas hydrophila as affected by strain, temp. and humectant) 1994:697044 CAPLUS 121:297044 ANSWER 22 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN A review, with 61 refs. Sodium lactate is used as humectant and flavor enhancer in meat and poultry products, and there is growing evidence of antimicrobial properties of the salt. Potassium. 1994:577906 CAPLUS 121:177906 ANSWER 23 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN 72-17-3, Sodium lactate RL: USES (Uses) (humectant, foamable conc. contq., with high stability, for fire extinguisher) PATENT NO. KIND DATE APPLICATION NO. DATE ----------------19920728 WO 9302788 A1 19930218 WO 1992-US6245 W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG US 1991-739648 US 5225095 Α 19930706 19910802 AU 9224228 A1 19930302 AU 1992-24228 1993:150553 CAPLUS 118:150553 ANSWER 24 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN . . . and urea-type exptl. herbicide) and fungicides (phthalide and amide-type exptl. fungicide, etc.) was examd. in the presence or absence

L6

AΒ of humectant (glycerin or sodium lactate). Depending on the concn. or the type of humectant incorporated, the pesticides showed different activities. The effect of humectants on. .

AN 1993:34403 CAPLUS

DN 118:34403

PΤ

AN DN

L6 AΒ

IT

AN DN

L6

AB

ANDN

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IT

PΙ

AN DN

ANSWER 25 OF 357 CAPLUS COPYRIGHT 2003 ACS on STN

SUMM When the compound of the present invention is used in the form of an ointment, it is contained in an amount of 0.01 to 10 w/w % in the ointment.

SUMM The ointment base which can be used includes oleaginous base (a natural wax such as white beeswax or carnauba wax, a petroleum wax such as solid paraffin or microcrystalline wax, a hydrocarbon wax such as liquid paraffin, white soft paraffin or yellow petrolatum, plastibase, zelen 50W, silicone, a vegetable oil, pork tallow, beef tallow, a simple ointment or lead oleate plaster), an emulsion type ointment base (an O/W type base such as a hydrophilic ointment or a vanishing cream or a W/O type base such as a hydrophilic petrolatum, a purified lanolin, aquahole, eucelin, neocelin, an absorptive ointment, a hydrated lanolin, cold cream, a hydrophilic plastibase), a water-soluble base (a macrogol ointment or solbase) or a suspension type ointment base (a lyogel base, i.e. a hydrogel base such as a non-fat ointment, a gelbase or lotion; or an FAPG base (a suspension of a microparticle of an aliphatic alcohol such as stearyl alcohol or cetyl alcohol in propylene glycol), and these ointment base can be used alone or in a combination of not less than two bases.

SUMM Further, when to be used as an **ointment**, the compound of the present invention is dissolved in a solubilizing and absoptive accelerating agent and added to the above-mentioned **ointment** base.

SUMM The solubilizing and absoptive accelerating agent to be used means the agent in which the compound of the present invention is soluble at a concentration of at least not less than 0.01 w/w % and which can accelerate the absorption of the compound of the present invention from skin when formulated as an ointment, and includes a lower alkanediol (e.g. ethylene glycol, propylene glycol or butylene glycol), an alkylene carbonate (e.g. propylene carbonate or ethylene carbonate), an alkanedicarboxylic acid ester (e.g. dimethyl adipate, diethyl adipate, diisopropyl adipate, diethyl pimerate, diethyl sebacate or dipropyl sebacate), a higher alkanoic acid glycerin ester (e.g. monolaurin, dilaurin or trilaurin), a higher alkenoic acid glycerin ester (e.g. monoolein, diolein or triolein), a higher alkanoic acid alkyl ester (e.g. isopropyl myristate or ethyl myristate), a higher unsaturated alcohol (e.g. geraniol or oleyl alcohol) or an azacycloalkane (e.g. 1-dodecylazacycloheptan-2-one). These solubilizing and absoptive accelerating agent can be used alone or in a mixture of not less than two agents, and can be added at a sufficient amount to dissolve the compound of the present invention. The amount generally ranges from 2 parts by weight to 200 parts by weight per one part by weight of the compound of the present invention. The upper amount is limited not to deteriorate the physicochemical properties of the

The ointment which contains the compound of the present invention may contain, in addition to the above-mentioned ointment base, other additives such as an emulsifier (e.g. polyoxyethylene hardened caster oil, glycerol monostearate, sorbitan sesquioleate or lauromacrogol); a suspending agent (e.g. polyoxyethylene glycol, polyvinylpyrrolidone or sodium carboxymethylcellulose); an antioxidant (e.g. a phenol or a quinone; a preservative (e.g. paraoxybenzoic acid ester); a humectant (e.g. glycerin, D-sorbitol or propylene glycol); a favoring agent, a coloring matter; an antiseptic; a higher alkenoic acid (e.g. oleic acid), and moreover other drugs which are useful for the treatment of a skin diseases.

SUMM The ointment of the present invention can be prepared by

mixing a solution containing the compound of the present invention with an ointment base in accordance with a conventional method. In the process of formulation, not less than one of the adjuvant or additive mentioned above can be simultaneously added to the ointment base. Furthermore, the ointment can be manufactured by dissolving the compound of the present go invention in the solubilizing and absoptive accelerating agent, admixing the obtained solution with the ointment base, stirring the obtained mixture under heating, and then cooling the resultant mixture.

- SUMM The ointment containing the compound of the present invention can be used by applying to the affected part of the skin once to several times (e.g. once to four times) a day.
- SUMM The paste or liniment containing the compound of the present invention can be prepared by using the same base and according to the same method as those of the **ointment** as mentioned above.
- SUMM The suppository containing the compound of the present invention may be in various forms such as a rectal suppository which is solid at the normal temperature and melts at a body temperature; an **ointment** or liquid enema which can be prepared by dissolving or suspending the compound of the present invention in a liquid base; a soft capsule for the rectal administration; or an injection for the rectal administration.
- SUMM Moreover, the compound of the present invention can be used in combination with other immunosuppressant(s), steroid(s) (prednisolone, methylprednisolone, dexamethasone, hydrocortisone and the like) or nonsteroidal anti-inflammatory agent. As the other immunosuppressant, preferred is particularly selected from azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morphorinoethyl, cyclosporin, rapamycin, tacrolimus monohydrate.
- DETD 2-Amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol hydrochloride (hereunder referred to as compound (I), 1 g) was dissolved in 19 g of hydrophilic petrolatum under heating at 60.degree. C., and cooled with stirring to prepare an **ointment** containing 5% of Compound (I).
- DETD Compound (I) (1 g) was mixed well with 19 g of plastibase (gelled hydrocarbon) in a mortar for about 30 minutes to prepare an ointment containing 5% of Compound (I).
- CLM What is claimed is:
 6. The method according to claim 1 or 2, wherein the
 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a Pharmaceutically
 acceptable acid addition salt thereof is administered in combination
 with another immunosuppressant.
 - 7. The method according to claim 1, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
 - 8. The method according to claim 7, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
 - 9. The method according to claim 1, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another immunosuppressant.
 - 10. The method according to claim 2, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid

addition salt thereof is administered in combination with another immunosuppressant.

- 11. The method according to claim 2, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another immunosuppressant.
- 12. The method according to claim 5, wherein the 2-amino-2-(2-(4-octylphenyl)ethyl)propane-1,3-diol or a pharmaceutically acceptable acid addition salt thereof is administered in combination with another immunosuppressant.
- 13. The method according to claim 6, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
- 14. The method according to claim 9, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
- 15. The method according to claim 10, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
- 16. The method according to claim 11, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
- 17. The method according to claim 12, wherein the other immunosuppressant is azathioprine, brequinar sodium, deoxyspergualin, mizoribine, mycophenolate 2-morpholinoethyl, cyclosporin, rapamycin, or tacrolimus monohydrate.
- 18. The method according to claim 7, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
- 19. The method according to claim 14, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
- 20. The method according to claim 15, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
- 21. The method according to claim 16, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.
- 22. The method according to claim 17, wherein the other immunosuppressant is mycophenolate 2-morpholinoethyl, cyclosporin, or rapamycin.

Solid dosage forms for oral administration include capsules, tablets, pills, powders, and granules. In such solid dosage forms, the active compound is mixed with at least one inert, pharmaceutically acceptable excipient or carrier such as sodium citrate or dicalcium phosphate and/or a) fillers or extenders such as starches, lactose, sucrose, glucose, mannitol, and silicic acid, b) binders such as, for example, carboxymethylcellulose, alginates, gelatin, polyvinylpyrrolidone, sucrose, and acacia, c) humectants such as glycerol, d) disintegrating agents such as agar-agar, calcium carbonate, potato or tapioca starch, alginic acid, certain silicates, and sodium carbonate, e) solution retarding agents such as paraffin, f) absorption accelerators such as quaternary ammonium compounds, q) wetting agents such as, for example, cetyl alcohol and glycerol monostearate, h) absorbents such as kaolin and bentonitc clay, and i) lubricants such as talc, calcium stearate, magnesium stearate, solid polyethylene glycols, sodium lauryl sulfate, and mixtures thereof. In the case of capsules, tablets and pills, the dosage form may also comprise buffering agents. A further form of topical administration is to the eye, as for the DETD treatment of immune-mediated conditions of the eye such as automimmue diseases, allergic or inflammatory conditions, and corneal transplants. The compound of the invention is delivered in a pharmaceutically acceptable ophthalmic vehicle, such that the compound is maintained in contact with the ocular surface for a sufficient time period to allow the compound to penetrate the corneal and internal regions of the eye, as for example the anterior chamber, posterior chamber, vitreous body, aqueous humor, vitreous humor, cornea, iris/cilary, lens, choroid/retina and sclera. The pharmaceutically acceptable ophthalmic vehicle may, for example, be an ointment, vegetable oil or an encapsulating

DETD The compounds of the invention may be prepared using one or more of the processes which follow. The starting materials for use in these processes are preferably one of the macrolides isolated from culture media obtained in accordance with known methods by fermentation of microorganisms of the genus Streptomyces, which are disclosed in European Patent Application No. 0184162. Samples are available from the Fermentation Research Institute, Tsukuba, Ibaraki 305, Japan under the provisions of the Budapest Treaty, under deposit No. FERM BP-927. This strain has been redeposited on Apr. 27, 1989 with the Agricultural Research Culture Collection International Depository, Peoria, Ill. 61604, U.S.A. under the provisions of the Budapest Treaty, under deposit No. NRRL 18488. The macrolide FR-900520 (European Patent Application 0184162), also known as ascomycin, may be prepared in accordance to the published methods of (i) H. Hatanaka, M. Iwami, T. Kino, T. Goto and M. Okuhara, FR-900520 and FR-900523, Novel immunosuppressants isolated from A streptomyces. I. Taxonomy of the producing strain. J. Antibiot., 1988. XLI(11), 1586-1591; (ii) H. Hatanaka, T. Kino, S. Miyata, N. Inamura, A. Kuroda, T. Goto, H. Tanaka and M. Okuhara, FR-900520 and FR-900523, Novel immunosuppressants isolated from A streptomyces. II. Fermentation, isolation and physico-chemical and biological characteristics. J. Antibiot., 1988. XLI(11), 1592-1601; (iii) T. Arai, Y. Koyama, T. Suenaga and H. Honda, Ascomycin, An Antifungal Antibiotic. J. Antibiot., 1962. 15(231-2); and (iv) T. Arai in U.S. Pat. No. 3,244,592. One or more of the processes discussed below may be then employed to produce the desired compound of the invention.

material.

Ascomycin (2.5 g, 0.032 mol, Formula I: R.sub.100 .dbd.H; R.sub.101 .dbd.ethyl; R.sub.102 .dbd.H; R.sub.103 .dbd.OH; R.sub.104 .dbd.OH; R.sub.105 .dbd.H) was dissolved in a solution of imidazole (43.03 g, 0.64 mol) in dry N,N-dimethylformamide (500 mL) and tert-butyldimethylchlorosilane (47.64 g, 0.32 mol) was added in portions and stirred at room temperature for 24 hours. N,N-dimethylformamide and excess tert-butyldimethylchlorosilane were removed by distillation (bath 35.degree. C.) under high vaccum. The solid residue was dissolved in 350

mL of ethylacetate, and the ethyl acetate layer was washed with saturated ammonium chloride aq. solution (200 mL.times.3), 10%-NaHSO.sub.4 (200 mL.times.3), brine, saturated NaHCO.sub.3 (200 mL.times.3), and brine (200 mL.times.3). After dired over MgSO.sub.4, solvent was removed in vacuo and the solid residue was purified by silica gel chromatography, followed by HPLC eluting with 5% acetone in hexanes providing the title compound (27 g) in 84% yield. MS (FAB) m/z: M+K=1058.

- DETD In addition to the title compound, unreacted starting material (Example 1, 1.5 g) and ascomycin (500 mg) were isolated as a pure form.
- Methylsulfide-chlorine complex was prepared by adding oxalyl chloride (0.32 g) into a stirred solution of dimethylsulfoxide (0.44 g) in methylene chloride (4 mL) and stirring at -70.degree. C. for 0.5 hours. The solution of the complex was added in slow dropwise fashion into a stirring solution of ascomycin (1.6 g) in methylene chloride (5 mL) at -70.degree. C. After stirring for 0.25 hours, triethylamine (1.4 g) was added at -70.degree. C. Stirring was continued at -70.degree. C. for 0.5 hours and then at room temperature for 1 hour. The reaction mixture was then diluted with ether (100 mL), washed with 1N HCl (aq) (2.times.30 mL), saturated brine (30 mL), dried over magnesium sulfate and solvent removed. The product was purified on silica gel (70 g) with ether elution. Yield: 0.95 g; MS (FAB) m/z: M+H=790.
- Ascomycin (10 g, 12.6 mmol) and pyridinium p-toluene sulfonate (1 g, 3.98 mmol) were dissolved in 200 mL of toluene and stirred at 70.degree. C. over night. Solvent was removed, and the residue was purified by silica gel column chromatography, eluting with 5-10% acetone in hexane. The title compound (8.89 g) was isolated in 91% yield. MS (FAB) m/z: M+K=812.
- DETD Following the procedures of Examples 1-3, but replacing ascomycin with the resultant compound of Example 50, the titled compound is obtained.
- DETD Following the procedure of Example 9, but replacing ascomycin (Formula I: R.sub.100 .dbd.H; R.sub.101 .dbd.ethyl; R.sub.102 .dbd.H; R.sub.103 .dbd.OH; R.sub.104 .dbd.OH; R.sub.105 .dbd.H) with the resultant compound 53 provides the titled compound.
- DETD Following the procedure of Example 9, but replacing ascomycin (Formula I: R.sub.100 .dbd.H; R.sub.101 .dbd.ethyl; R.sub.102 .dbd.H; R.sub.103 .dbd.OH; R.sub.104 .dbd.OH; R.sub.105 .dbd.H) with FK-523 (Formula I: R.sub.100 .dbd.H; R.sub.101 .dbd.methyl; R.sub.102 .dbd.H; R.sub.103 .dbd.OH; R.sub.104 .dbd.OH; R.sub.105 .dbd.H) provides the titled
- DETD The immunosuppressant activity of the compounds of the present invention was determined using the human mixed lymphocyte reaction (MLR) assay described by Kino, T. et al. in Transplantation Proceedings XIX(5):36-39, Suppl. 6 (1987), incorporated herein by reference. The results of the assay, shown below in Table 1, demonstrate that the compounds tested are effective immunomodulators at sub-micromolar concentrations.
- PI US 5530120

arbonate.

The inorganic salts may include sodium bicarbonate, magnesium sulfate and sodium chloride. In the case of sodium bicarbonate, optimum therapeutic results have been achieved when about 20% of the sodium bicarbonate particles are about 40 microns in diameter and the remaining 80% of particles vary in size down in diameter and the remaining 80% of particles vary in size down to about 1 micron or less in diameter. Such a particle size distribution maximizes cleaning efficiency without causing harmful tooth abrasion.

PI US 4812306

19890314

DETD The core composition is also ideally suited for the manufacture of a clear antiperspirant composition. A particular advantage of the invention is the formulation of a clear, high viscosity antiperspirant cream using the most effective anti-perspirant active available and at the highest concentration allowed by law which is 20% of aluminum zirconium tetrachlorohydrex gly. The invention, however, is not limited to the use of aluminum zirconium tetrachlorohydrex qly since the more economical but slightly less effective aluminum chlorohydrate can be used. Another advantage of the invention is that urea may be added to the aluminum zirconium complex which further reduces, prevents and heals skin irritation in the high viscosity cream. The preferred range of core components when the core is used as the basis for an antiperspirant is also about 20-40% water, 8-20% cetyl dimethicone copolyol, 10-35% cyclomethicone and about 8-25% of one or more salts. The composition may additionally contain one or more of the additional ingredients mentioned previously and in particular humectants, solvents, emulsifiers, thickeners or masking agents are desireable. In the anti-perspirant composition the humectant may be urea, propylene glycol or both. The salts may be inorganic salts such as one or more of sodium chloride, sodium thiosulfate, alone or in conjunction with antiperspirant actives such as aluminum zirconium tetrachlorohydrex gly or aluminum chlorohydrate. A variety of solvents are desireable particulaly SD-40 alcohol, isopropyl alcohol and other similar alcohols. Preferably the co-emulsifier is methoxy PEG-22 dodecylcopolymer or oleic acid derivatives included therein such as sorbitan oleate or glycyrrhizic acid or its derivatives. A masking agent may be desireable to mask any medicinal odors. Ethylene brassylate, for example, is

suitable for this use.

The antiperspirant composition preferably contains a humectant

One or more of urea or propylene glycol is suitable and the preferred ranges are 1-20% urea and/or 1-15% propylene glycol. Any of the forementioned antiperspirant actives are suitable either as the salt component along or in conjunction with other organic or inorganic salts. For example, one or more of aluminum zirconium tetrachlorohydrex gly, aluminum chlorohydrate, or magnesium chloride may be used. Optional additives such as co-emulsifers, thickeners, masking agents, and so on, may be desired. The co-emulsifers glycyrrhizic acid, Elfacos E 200, sorbitol, or PEG-30 Glyceryl monoacetate were used in the invention along with ethylene brassylate as a masking agent.

DETD In one further preferred embodiment of the invention the core composition is used to make a clear moisturizing sunscreen composition. The sunscreen composition contains the same component ranges of the clear moisturizing composition and additionally contains a humectant such as urea and/or propylene glycol and a U.V. absorber. Generally preferred are one or more of the humectants urea or propylene glycol in the range of 1-20% and 1-15% respectively. Any one or more of a U.V. absorber of Category I or Category II is suitable, for example 1.4-8% of octyl dimethyl PABA.

1. A clear water in oil microemulsion moisturizing cream composition comprising the following essential constituents: (a) 8-20% of an ingredient selected from the group consisting of a mixture having an HLB 4-6 of cetyl dimethicone copolyol, polyglyceryl-3 oleate, and hexyl laurate; a mixture having an HLB 4-6 of cetyl dimethicone copolyol, polyglyceryl-4-isostearate, and hexyl laurate; cetyl dimethicone copolyol of HLB 4-6; and a mixture having an HLB 4-6 of cetyl dimethicone copolyol and hexyl laurate (b) 20-40% water, (c) 10-35% of a silicone selected from the group consisting of a polydimethylsiloxane having molecular weight of about 500-26,000, a polymethyl hydrogen siloxane of molecular weight about 500-23,000, cyclomethicone, phenyl dimethicone, hexamethyldisiloxane, trimethylsiloxysilicate, and stearoxy trimethylsilane, (d) 5-15% of a C.sub.1-6 organic alcohol selected from the group consisting of SD-40 alcohol and isopropyl alcohol, (e) 8-20% by weight of a salt selected from the group consisting of an organic

salt and inorganic salt wherein the inorganic salt is sodium chloride, magnesium sulfate, aluminum zirconium tetrachlorohydrex gly, magnesium chloride, sodium thiosulfate, aluminum chloride, aluminum chlorohydrate, sodium acetate, sodium citrate, sodium phosphate, or calcium chloride or mixtures thereof, and the organic salt is sodium aluminum lactate, sodium butoxyethyoxy acetate, sodium caprylate, sodium citrate, sodium lactate, sodium dihydroxyglycinate, sodium gluconate, sodium glutamate, sodium hydroxymethane sulfonate, sodium oxalate, sodium phenate, sodium propionate, sodium sacchardine, sodium salicylate, sodium sarcosinate, sodium tolene sulfonate, magnesium aspartate, calcium propionate, calcium saccharine, calcium-D-saccharate, calcium thioglycolate, aluminum caprylate, aluminum citrate, aluminum diacetate, aluminum glycinate, aluminum lactate, aluminum methionate, aluminum phenosulfonate, potassium aspartate, potassium biphthalate, potassium bitartrate, potassium glycosulfate, potassium sorbate, potassium thioglycolate, potassium toluenesulfonate, potassium troclosene, magnesium lactate, or mixtures thereof, (f) 1-20% of a humectant selected from the group consisting of urea and propylene glycol.

- 2. The composition of claim 1 wherein the inorganic salt is sodium chloride, magnesium sulfate, aluminum zirconium tetrachlorohydrex gly, magnesium chloride, sodium thiosulfate, aluminum chloride, aluminum chlorohydrate, sodium acetate, sodium citrate, sodium phosphate, or calcium chloride.
- 3. The composition of claim 1 which is a clear moisturizing cream additionally containing one or more humectant.

PI US 5162378

19921110

L71 ANSWER 7 OF 7 USPATFULL on STN

SUMM For nasal administration, ascomycins of the invention will suitably be administered in liquid form from a nasal applicator. Forms suitable for ophthalmic use will include lotions, tinctures, gels, ointments and ophthalmic inserts, again as known in the art. For rectal administration. i.e. for topical therapy of the colon, ascomycins of the invention may be administered in suppository or enema form, in particular in solution, e.g. in vegetable oil or like oily system for use as a retention enema.

Pharmaceutically acceptable diluents or carriers under C above are SUMM diluents or carriers acceptable for topical application at the intended side of therapy, e.g. diluents or carriers acceptable for topical administration pulmonarily, dermally, nasally, ocularly or rectally. Forms in topically administrable form, e.g. enabling or facilitating topical administration, include, e.g. dry powder preparations of the active ingredient (i.e. of the invention) in substantially pure form, for example as employed in the art for delivery from dry powder inhalation device. Means or devices enabling or facilitating topical administration include, in particular, inhalation devices as well as containers and the like from which the active ingredients may be delivered in a form capable of topical application. Preferred embodiments as defined under C will be (i) such as permit topical administration within the airways or lungs, e.g. by inhalation, in the case of ascomycins of the invention bearing one or more oxycarbonyl moieties, and (ii) such as to permit dermal administration, e.g., in the form of an ointment or cream, in the case of ascomycins of the invention bearing one or more carboxy moieties.

For dermal administration for the treatment of diseases or conditions of the skin, ascomycins of the invention will generally be administered in appropriate, i.e. dermally applicable, form comprising a therapeutically effective concentration of the ascomycin of the invention, e.g. from ca. 0.001 to 10%, e.g. 0.004%-1% by weight of ascomycin of the invention, together with a dermally acceptable diluent or carrier therefor. Formulations for dermal administration may take the form of creams, ointments, gels, or transdermal delivery systems, e.g. patches and, in addition to inert diluents or carriers, may suitably contain skin penetration enhancing agents, analogously to formulations as known in the art. Such compositions will suitably be applied to the site of treatment in an amount of from ca. 0.005 to ca. 0.05 g/cm.sup.2, 1, 2, or 3.times. daily.

ACCESSION NUMBER: 1999:81841 USPATFULL

TITLE:

Ascomycins

INVENTOR(S):

Hersperger, Rene, Munchenstein, Switzerland

Naef, Reto, Rheinfelden, Switzerland

PATENT ASSIGNEE(S): Novartis AG, Basel, Switzerland (non-U.S. corporation)

	NUMBER	KIND DATE	•
PATENT INFORMATION:	US 5925649	19990720	
•	WO 9631514	19961010	. کر
APPLICATION INFO.:	US 1997-930730	19971002	(8)
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·		19971002	PCT 371 date
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PRIORITY INFORMATION: GB 1995-7128 19950406

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DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Raymond, Richard L.
ASSISTANT EXAMINER: Ngo, Tamthom T.
LEGAL REPRESENTATIVE: Loeschorn, Carol A.

NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 827

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L71 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

An HPLC/MS/MS assay for tacrolimus (FK506) in whole blood using FR900520 as an internal std. was validated over the std. curve range of 0.100-10.040 ng mL-1. The calibration curve for tacrolimus in human blood gave a slope of 0.2481, an intercept of 0.007, and a correlation coeff. (r) of 0.9996, with no interference noted from human blood, analyte, or internal std. stock solns. Use of EDTA or heparin as the preservative in blood resulted in no significant differences. Samples were stable for at least the time required to assay the max. no. of samples that could be placed in the automated system. The limit of sensitivity of the assay was set at the concn. of the lowest nonzero std. tested, i.e., 0.100 ng ml-1. However, validation of the assay to a limit of 0.010 ng ml-1 is currently underway. The within-run and between-run precision and accuracy of the method were detd. for four quality control samples. The highest CV was seen at 0.1 ng ml-1 (17.6% within-run and 15.9% between-run), with other CV < 5%. The recovery ranged 79.6-81.3% for tacrolimus over the range 0.3-8.0 ng ml-1 and was $63.10 \cdot +- \cdot \cdot 1.37\%$ for FR900520. There was a linear correlation (r2 = 0.963) between assay results by HPLC/MS/MS and ELISA in whole blood from atopic dermatitis patients treated with topical tacrolimus ointment. The difference between the means .+-. S.D. detd. by HPLC/MS/MS (1.22 .+-. 1.46 ng ml-1) and ELISA (1.12 + ... 1.29 ng ml - 1) was significant by a paired t-test (P<0.001). Similarly, there was a linear correlation (r2 = 0.841) between assay results by HPLC/MS/MS and IMx in whole blood from solid organ transplant patients treated with tacrolimus. The difference between the means was significantly higher (P<0.001) for the IMx (15.80 .+-. 8.37 ng ml-1) than the HPLC/MS/MS (13.42 .+-. 6.87 ng ml-1).

1997:743570 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 128:57027

TITLE: An HPLC/MS/MS assay for tacrolimus in patient blood

samples. Correlation with results of an ELISA assay

Alak, Ala M.; Moy, Selina; Cook, Melissa; Lizak, AUTHOR(S):

Paula; Niggebiugge, Adali; Menard, Shantil; Chilton,

Anthony

CORPORATE SOURCE: Fujisawa Research Institute of America, Northwestern

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60201, USA

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(1997), 16(1), 7-13 CODEN: JPBADA; ISSN: 0731-7085

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L71 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

104987-11-3, FK506 IT104987-12-4, **FR900520**

RL: BIOL (Biological study)

(ointment contg. absorption promoter and, for treatment of

skin diseases)

ACCESSION NUMBER: 1992:241941 CAPLUS

DOCUMENT NUMBER: 116:241941

TITLE: Ointments containing tricyclic compounds for treatment

of skin diseases

INVENTOR(S): Asakura, Sotoo; Murakami, Yoshio; Kanagawa, Nobuto;

Nakate, Toshiomi

PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan

Eur. Pat. Appl., 14 pp. SOURCE:

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
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	TENT NO.		DATE		APPLICATION NO. DATE
EP	474126 474126	A1	19920311		EP 1991-114598 19910830
				., GI	B, GR, IT, LI, LU, NL, SE
ĀU	9183515	A1	19920312		AU 1991-83515 19910830
AU	656145	B2	19950127		
AT	150304	E	19970415		AT 1991-114598 19910830
ES	2099112	T3	19970516		ES 1991-114598 19910830
HU	59002	A2	19920428		HU 1991-2846 19910903
ZA	9106983	A	19920527		ZA 1991-6983 19910903
RU	2079303	C1	19970520		RU 1991-5001707 19910903
CA	2050623	AA	19920305		CA 1991-2050623 19910904 ·
CA	2050623		20020205		
CN	1059468	A	19920318		CN 1991-108796 19910904
CN	1069193	В	20010808		
JP	05017481	A2	19930126		JP 1991-224418 19910904
JP	2526752	B2	19960821		
US	5385907	A	19950131		US 1993-62330 19930517
PRIORITY	Y APPLN. INFO.:			JP	1990-235177 A 19900904
				US	1991-750942 B1 19910828
OTHER SO	DURCE(S).	MΔ	PPAT 116.241	941	

OTHER SOURCE(S): MARPAT 116:241941

L77 ANSWER 1 OF 30 USPATFULL on STN

CLM What is claimed is:

37. The composition of claim 30, wherein said humectant is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, sodium lactate, sorbitol, and mixtures thereof.

PI US 2003077962 A1 20030424

=> d 177 1-30 hit, pi, ab

L77 ANSWER 1 OF 30 USPATFULL on STN

CLM What is claimed is:

37. The composition of claim 30, wherein said humectant is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, sodium lactate, sorbitol, and mixtures thereof.

PI US 2003077962 A1 20030424

AB A skin barrier-enhancing tissue product, such as facial tissue, bath tissue or paper towels and the like, can be made by applying, on the surface(s) of the tissue, a lipid-enriched melted oil based-hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant having an HLB range from about 3 to about 6, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the surface(s) of the tissue.

L77 ANSWER 2 OF 30 USPATFULL on STN

CLM What is claimed is:

11. The non-woven article of claim 9 further comprising a lotion containing at least one ingredient selected from the group consisting of **sodium chloride** solution, preservatives, boric acid, bicarbonates, moisturizers, **emollients**, surfactants, **humectants**, alcohols, water, and fragrances.

PI US 2003008591 A1 20030109

AB The present invention is directed to a non-woven material having an emulsion binder, which is dispersible in water, yet non-dispersible in aqueous solutions containing 0.5 weight percent or more of an inorganic salt. The water-dispersible polymer comprises from 1 to 100 percent by weight of a hydrophilic monomer and from 0 to 99 percent by weight of at least one non-hydrophilic monomer, wherein a film formed from said polymer has a Tg of from -40 to 105.degree. C. The dispersible non-woven material is useful in forming disposable articles which can be disposed of by flushing down a toilet.

L77 ANSWER 3 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The composition of claim 1, wherein said humectant is selected from the group consisting of PEG, glycerin, propylene glycol, sorbitol and sodium lactate.

PI US 6310014 B1 20011030

Personal and household care compositions that deliver an audible crackling or popping sound during use. The sound is created by the release of pressurized carbon dioxide that has been encapsulated in a water-soluble structure. The carbon dioxide gas is released as the encapsulating material dissolves or when it is ruptured by mechanical action. The popping or crackling sound helps create consumer interest by signaling the presence and continued action of the product.

- L77 ANSWER 4 OF 30 USPATFULL on STN
- CLM What is claimed is:
 - 34. The method of claim 1, wherein said humectant is selected from the group consisting of: glycerin; hydrogenated starch hydrolysate; propylene glycol; sodium PCA; sodium lactate; sorbitol; and, mixtures thereof.
 - 37. The method of claim 26, wherein said humectant is selected from the group consisting of: glycerin; hydrogenated starch hydrolysate; propylene glycol; sodium PCA; sodium lactate; sorbitol; and, mixtures thereof.
- PI US 6287581 B1 20010911
- AB A superior skin barrier enhancing body facing material, such as a body side liner on an absorbent article, can be made by applying, on the outer surface of the body facing material, a lipid-enriched hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the outer surface of the body facing material.
- L77 ANSWER 5 OF 30 USPATFULL on STN
- CLM What is claimed is:
 - 40. The composition of claim 32, wherein said humectant is selected from the group consisting of: glycerin, hydrogenated starch hydrolysate, propylene glycol, sodium PCA, sodium lactate, sorbitol, and mixtures thereof.
- PI US 2001014350 A1 20010816 US 6534074 B2 20030318
- AB A superior skin barrier enhancing body facing material, such as a body side liner on an absorbent article, can be made by applying, on the outer surface of the body facing material, a lipid-enriched hydrophobic composition comprising a natural fat or oil, a sterol or sterol derivative, an emulsifying surfactant, a humectant, an emollient, a wax, and a viscosity enhancer, and thereafter resolidifying the composition to form a distribution of solid composition on the outer surface of the body facing material.
- L77 ANSWER 6 OF 30 USPATFULL on STN CLM What is claimed is:
 - 1. Process for disinfecting a skin surface or mucous surface, which comprises applying to the surface an effective amount of a disinfecting composition which contains at least an optical brightener and optionally a humectant selected from the group consisting of sorbitol solution, 1-2 propylene glycol, PEG derivatives and sodium lactate, provided that said composition does not contain any fluoroaliphatic surfactant nor reducing agent selected from the class of hydrazine and hydroxylamine and alkali metal salts of oxygen acids of divalent sulfur and tetravalent sulfur.
 - 11. A disinfecting composition for disinfecting a skin surface or mucous surface, which comprises at least 0.0001% to 3.0% by weight of an optical brightener and optionally a humectant selected from the group consisting of sorbitol solution, 1-2 propylene glycol, PEG derivatives and sodium lactate, provided that said composition does not contain any fluoroaliphatic surfactant nor reduction agent selected from the class of hydrazine and hydroxylamine and alkali metal salts of oxygen acids of divalent sulfur and tetravalent sulfur.
- PI US 6258370 B1 20010710 WO 9820094 19980514

AB A process and compositions for disinfecting the skin, hands and mucous membrane. The compositions contain an optical brightener and exhibit intense fluorescence in the visible wavelength range on exposure to UV light and thus permit simple monitoring of the treated skin or mucous membrane surfaces for ensuring complete disinfection, but without exhibiting the disadvantages associated with the use of conventional dyes, such as discoloration of the skin and articles.

L77 ANSWER 7 OF 30 USPATFULL on STN

CLM What is claimed is:

15. The method of claim 10, wherein the antioxidant includes butylated hydroxytoluene, the buffer includes Hepes, the isotonic reagent includes sodium chloride, the amino acid chelating agent includes serine, and the humectant includes sorbitol and glycerol; and the carrier protein includes bovine serum albumin.

PI US 6183979 B1 20010206

AB A method for preparation of an air-dried prothrombin time (PT) reagent which uses a recombinant protein and synthetic phospholipids is described. The source for the recombinant protein is rabbit brain, and the phospholipids employed are palmitoyloleoylphosphatidylcholine (POPC) and palmitoyloleoylphosphatidylserine (POPS). The particular formulation buffer used to dilute the lipidated tissue factor provides a reagent that is dried without lyophilization and remains stable for at least 2 weeks at 37 C. A method for preparing the improved PT reagent and a method of using the reagent to analyze blood PT is also provided.

L77 ANSWER 8 OF 30 USPATFULL on STN

CLM What is claimed is:

- 1. A cold, low fat peanut butter product comprising water and and a humectant selected from the group consisting of glycerin, propylene glycol, sorbitol, sodium lactate and combinations thereof and having a water activity level of less than 0.80.
- 8. A low fat peanut butter composition, comprising water, a peanut component; and a humectant selected from the group consisting of glycerin, propylene glycol, sorbitol, sodium lactate and combinations therein in an amount sufficient to reduce the water activity to less than 0.80, said component consisting of defatted peanut flour.
- 12. The method of claim 11 wherein said **humectant** is selected from the group consisting of glycerin, propylene glycol, sorbitol, **sodium lactate** and combinations thereof.

PI US 6153249 20001128

AB A low fat peanut butter product having a water activity level of less than 0.80, which can be obtained without heating. A humectant can be used in an amount sufficient to provide a predetermined water activity level. Shelf stability is thereby obtained without discoloration or the formation of off flavors.

L77 ANSWER 9 OF 30 USPATFULL on STN

CLM What is claimed is:

1. A care kit for facilitating reduced irritation associated with wearing contact lenses, the kit comprising: at least one solution for the care of contact lenses; at least one non-irritating solution for cleansing eyelids; instructions for informing contact lens wearers of the proper care of contact lenses in conjunction with eyelid hygiene for improved comfort while wearing contact lenses; and housing for securing the solution for the care of contact lenses, the solution for cleansing eyelids and the instructions wherein the non-irritating solution for cleansing eyelids comprises an anionic surfactant, a non-ionic thickener

and emollient, an amphoteric surfactant, a polyoxyethylenesorbitan fatty acid ester, lauroamphocarboxy glycinate, sodium laureth-13 carboxylate, PEG15 tallow polyamine, sodium chloride, and at least one microbiological preservative.

5. A method of caring for eyes and eyelids using a care kit for contact lens wearers comprising at least one contact lens solution, at least one eyelid cleanser and instructions for use of both the contact lens solution and eyelid cleanser for improved comfort of wearer, the solution, the cleanser and the instructions secured in a housing; the method comprising: using eyelid cleanser according to instructions for the removal and insertion of contact lenses; and applying contact lens solutions according to instructions for the removal and insertion of contact lenses wherein the eyelid cleanser comprises an anionic surfactant, a non-ionic thickener and emollient, an amphoteric surfactant, a polyoxyethylenesorbitan fatty acid ester, lauroamphocarboxy glycinate, sodium laureth-13 carboxylate, PEG-15 tallow polyamine, sodium chloride, and at least one microbiological preservative.

PI US 6112900 20000905

AB A care kit for reducing irritation and other ocular problems associated with wearing contact lenses is disclosed. The care kit includes at least one solution for the care of contact lenses; at least one non-irritating solution for cleansing eyelids; instructions for informing contact lens wearers of the proper care of contacts in conjunction with eyelid hygiene for improved comfort while wearing contact lenses; and housing for securing the solution for the care of contact lenses, the solution for cleansing eyelids and the instructions. Preferably, the solution for the care of contact lenses can be selected from a group comprising contact lens cleansing solution, disinfecting solution, soaking solution, wetting solution, storage solution, rinsing solution or a combination thereof. The eyelid cleanser can be soaked into a disposable pad and wrapped within an impervious wrapper. Alternatively, the eyelid cleanser is enclosed within an impervious bottle. Instructions to explain the use of contact lens solutions in conjunction with the eyelid cleanser for improved comfort while wearing lenses are included with the kit. In the method of this invention, the eyelid cleanser and contact lens solutions are applied according to the instructions provided.

L77 ANSWER 10 OF 30 USPATFULL on STN

CLM What is claimed is:

11. An oil-in-water emulsified composition according to claim 9, wherein said humectant is one or more selected from the group consisting of glycerin, fructose, trimethylglycine, sodium lactate, and sodium pyrrolidone carboxylate.

PI US 6074652 20000613

AB An oil-in-water emulsified composition comprising an a .alpha.-monoalkyl glyceryl ether, a wax, and a silicone oil: wherein the amount of the silicone oil is not less than 10 wt % with respect to an oil phase except the a .alpha.-monoalkyl glyceryl ether and the wax, this composition displays excellent emulsion stability and feeling of use.

L77 ANSWER 11 OF 30 USPATFULL on STN

CLM What is claimed is:

2. A process according to claim 1 wherein the humectant that is incorporated in the dough is sodium chloride, glycerol or sorbitol or a mixture of two or more of said humectants.

PI US 6017573 20000125

AB A process of preparing an intermediate moisture pasta product having a moisture content of from 15 to 28% by preparing a dough containing an

amount of a humectant to obtain a maximum water activity of 0.89 and an amount of alkali to increase the pH to about 11.5, sheeting or extruding the dough to give a fresh dough product, steaming the fresh dough product, and partially drying to a moisture content of from 15 to 28%.

L77 ANSWER 12 OF 30 USPATFULL on STN

CLM What is claimed is:

10. A process according to claim 9 wherein the **humectant** is salt, glycerol, sorbitol or any mixture of two or more **humectants** containing **sodium chloride**.

PI US 6001405 19991214

AB A process for the production of a pre-cooked, high moisture, shelf-stable or refrigerated, acidified filled pasta comprising a filling within a dough skin which comprises mixing pasta ingredients together to form a pasta dough, forming the dough into a sheet suitable to form the skin of the filled pasta, encasing a filling having a water activity of less than 0.93 and a pH of above 4.6 within the dough sheet to give a raw filled pasta, cooking the raw filled pasta in acidified water to a pH of above 4.6 to a moisture content of from 55 to 70% by weight, partially drying to achieve a moisture content of from 40 to 55% and a water activity of less than 0.93, and finally packaging the cooked pasta either with heat processing or under modified atmospheric conditions.

L77 ANSWER 13 OF 30 USPATFULL on STN

CLM What is claimed is:

9. A process according to claim 1 wherein the solid humectant is sodium chloride.

PI US 5958488 19990928

AB A process of preparing a shelf stable pasta having a moisture content of from about 15 to about 35% which comprises preparing a fresh pasta, steaming the fresh pasta, partially drying to a moisture content of from about 15 to about 35%, coating the partially dried pasta with a solid humectant in particulate form before or after placing in a package, and packaging the pasta in a container optionally under modified atmospheric conditions.

L77 ANSWER 14 OF 30 USPATFULL on STN

CLM What is claimed is:

4. An oil-water mixed composition according to claim 1, wherein said humectant is selected from the group consisting of polyethylene glycol, sorbitol, maltitol, hyaluronic acid, chondroitin sulfate, erythritol, trimethyl glycin, sodium lactate, and pyrrolidonecarboxylic acid.

PI US 5919398 19990706

WO 9629975 19961003

AB An oil-water mixed composition is consisted of a solid or semisolid oil phase at room temperature, and a water phase which is dispersed into the oil phase. The water phase contains a humectant and is solid or semisolid at room temperature. Preferably, the oil phase contains hydrophobic silica, dextrin fatty acid ester or polyvalent alcohol oligo ester of long chain monocarboxylic acid and long chain dicarboxylic acid. The oil-water mixed composition is superior in stability with passage of time and safety. In addition, this composition has demonstrated little stickiness and sensation of unsuitability for skin, and has much emollient effect (i.e., to prevent the skin from dryness) and is persistent in preserving its emollient effect.

L77 ANSWER 15 OF 30 USPATFULL on STN

CLM What is claimed is:

1. A method of treating skin comprising: rubbing onto the skin a body

polisher lotion comprising a mixture of **sodium chloride** salt and oil **emollient**, the salt being a gritty solid component in suspension in the oil **emollient** so that the lotion is a two phase lotion which feels gritty to the touch and which exfoliates and moisturizes the skin when the lotion is rubbed onto the skin; continuing the rubbing until the skin is exfoliated to allow the oil emollient to penetrate into the skin; and after the step of continuing, at least partly rinsing the body polisher lotion off the skin with water.

- PI US 5866145 19990202
- AB A body polisher and method of using the body polisher as a skin treatment, includes a two phase composition containing Dead Sea salt and emollient. The emollient is advantageously silicone oil and is present in about 32.67% by weight. About 66.66% by weight Sea salt is provided, the remainder being fragrance.
- L77 ANSWER 16 OF 30 USPATFULL on STN
- CLM What is claimed is:
 - 30. The smokable device of claim 23, wherein the dry humectant is selected from the group consisting of glycerol, sorbitol, propylene glycol, sodium lactate, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.
 - 46. The filter of claim 39, wherein the dry humectant is selected from the group consisting of glycerol, sorbitol, propylene glycol, sodium lactate, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.
 - 65. The method of claim 63, wherein the dry humectant is selected from the group consisting of glycerol, sorbitol, propylene glycol, sodium lactate, calcium chloride, potassium phosphate, sodium pyrophosphate, sodium polyphosphate, calcium citrate, calcium gluconate, potassium citrate, potassium gluconate, sodium tartrate, sodium potassium tartrate, and sodium glutamate.
- PI US 5860428 19990119
- AB A cigarette filter comprises a humectant, preferably sodium pyroglutamate, and optionally a surfactant. The humectant absorbs moisture from the tobacco smoke for wet-filtration of the tobacco smoke.
- L77 ANSWER 17 OF 30 USPATFULL on STN
- CLM What is claimed is:
 - 7. The composition of claim 1 wherein the **humectant** is selected from the group consisting of sorbitol, molasses, potassium lactate, **sodium lactate**, glycerol, potassium acetate and sodium acetate.
 - 12. A liquid concentrate solution composition as in claim 11, wherein said organic humectant is selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, sodium lactate, potassium acetate and sodium acetate.
 - 17. A liquid concentrate solution composition for improving plant root watering consisting essentially of (a) from 25 to 75 parts by volume of an organic humectant selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, sodium lactate, potassium acetate and sodium acetate, (b) from 0.2 to 1.5 parts by volume of a sodium carboxymethyl cellulose or a cellulose ether adhesive thickener, (c) from 0.2 to 5 parts by volume of a binder

selected from the group consisting of (1) a water soluble polysaccharide, (2) a hygroscopic adhesive binder consisting of a wheaten or potato dextrin, and (3) a calcium, sodium or ammonia salt of lignosulfonic acid, (d) from 0.2 to 2.0 parts by volume of a wetting agent, and (e) from 75 to 25 parts by volume of water based on the total composition.

18. A liquid concentrate solution composition for improving plant root watering consisting essentially of from 25 to 75 parts by volume of an organic humectant selected from the group consisting of glycerol, sorbitol, molasses, potassium lactate, sodium lactate, potassium acetate, sodium acetate, and blends of glycerol and/or sorbitol with the sodium or potassium salt of alpha-hydroxypropionic acid, from 0.2 to 1.5 parts by volume of a thickener selected from the group consisting of sodium carboxymethyl cellulose and a cellulose ether adhesive thickener, from 0.2 to 5 parts by volume of a binder selected from the group consisting of (1) a water soluble polysaccharide, (2) a hygroscopic adhesive binder consisting of a wheaten or potato dextrin, and (3) a calcium, sodium or ammonia salt of lignosulfonic acid, from 0.2 to 2.0 parts by volume of a wetting agent selected from the group consisting of a nonyl phenol (9-15 mole) ethoxylate and calcium lingnosulfonate, and from 75 to 25 parts by volume of water.

PΤ US 5814123

AΒ

19980929

Improved solutions for watering plant roots and methods of application, the solutions containing in parts by volume (1) humectant from 25 to 75, (2) thickener from 0.2 to 1.5, (3) binder from 0.2 to 5, (4) wetting agent from 0.2 to 2.0 and (5) water 75 to 25.

L77 ANSWER 18 OF 30 USPATFULL on STN CLM

What is claimed is:

- 7. The method of claim 6 wherein the humectant is selected from the group consisting of sodium chloride, propylene glycol and glycerol.
- 8. The method of claim 6 wherein the humectant is an aqueous solution of sodium chloride which comprises from about 10 to about 20 percent sodium chloride by weight.
- 10. The method of claim 9 wherein the humectant is selected from the group consisting of sodium chloride, propylene glycol and glycerol, and the acidulant is selected from the group consisting of citric acid, lactic acid, fumaric acid, tartaric acid, malic acid and glucono delta lactone.

PΙ US 5695801 19971209

A shelf-stable, uncooked or partially cooked moist pasta is produced by AB treating freshly extruded or sheeted pasta with steam to set the pasta surface, immersing the steam treated pasta in an aqueous solution containing acidulants and/or humectants, partially drying to remove surface moisture, sealing the pasta in a container, and thermally pasteurizing the pasta while it is in the container using conventional thermal processes or microwave treatment. The pasta thus produced is shelf-stable under non-refrigerated conditions and has an equivalent or better texture, color and flavor than commercially available, fresh refrigerated pastas.

ANSWER 19 OF 30 USPATFULL on STN L77

CLM What is claimed is:

> 3. The shaving system of claim 2 wherein the humectant is selected from the group consisting of ethylene glycol, glycerine, propylene glycol, dipropylene glycol, triethylene glycol,

1,3-propanediol, butylene glycol, sorbitol, sodium pyroglutamate, N-acetylethanolamine, sodium lactate, isopropanol, polyalkylene glycols of the formula ##STR2## wherein R is H or CH.sub.3 and n has an average value of about 2 to about 10, and polyethylene glycol glyceryl ethers.

PI US 5665340 19970909

- The present invention relates to a method of improving shaving comfort by softening the hair to be shaved so as to reduce the cutting force required to cut it. The novel method comprises carrying out the following sequential steps:
 - (a) contacting an area of hair to be shaved with a reducing agent that breaks disulfide linkages in hair;
 - (b) contacting the area of hair treated in step (a) with a humectant and allowing it to dry or partially dry;
 - (c) contacting the area treated in step (b) with water to hydrate the hair; and
 - (d) shaving the hydrated hair of step (c).
- L77 ANSWER 20 OF 30 USPATFULL on STN

CLM What is claimed is:

10. The method of claim 9 wherein the **humectant** is selected from the group consisting of ethylene glycol, glycerine, propylene glycol, dipropylene glycol, triethylene glycol, 1,3-propanediol, butylene glycol, sorbitol, sodium pyroglutamate, N-acetylethanolamine, **sodium lactate**, isopropanol, polyalkylene glycols of the formula ##STR2## wherein R is H or CH.sub.3 and n has an average value of about 2 to about 10, and polyethylene glycol glyceryl ethers.

PI US 5500210 19960319

- The present invention relates to a method of improving shaving comfort by softening the hair to be shaved so as to reduce the cutting force required to cut it. The novel method comprises carrying out the following sequential steps:
 - (a) contacting an area of hair to be shaved with a reducing agent that breaks disulfide linkages in hair;
 - (b) contacting the area of hair treated in step (a) with a humectant and allowing it to dry or partially dry;
 - (c) contacting the area treated in step (b) with water to hydrate the hair; and
 - (d) shaving the hydrated hair of step (c).
- L77 ANSWER 21 OF 30 USPATFULL on STN

CLM What is claimed is:

- 10. The composition of claim 9 further comprising a humectant selected from the group consisting of sodium lactate, sorbitol, glycerine and a combination of said humectants.
- 23. The method of claim 22 wherein a humectant selected from the group consisting of sodium lactate, sorbitol, glycerine and a combination of said humectants is added to the concentrate.
- PI US 5225095 19930706
- AB An improved foamable protein hydrolysate based concentrate is provided containing multivalent cations and a water soluble polymer, which

remains stable in storage for at least six months and which, when diluted with 10 to 50 parts of water and mixed with air to generate a foam, produces a foam which lasts essentially unchanged for at least three days.

L77 ANSWER 22 OF 30 USPATFULL on STN

CLM What is claimed is:

5. A hygroscopic laminate as set forth in claim 1, wherein the humectant is selected from sodium lactate and sodium pyrrolidonecarboxylate.

PI US 5143773 19920901

AB A hygroscopic laminate comprises a hygroscopic layer comprising a gas permeable film, and a water-absorbing polymer and at least one humectant selected from the group consisting of acetic acid, propionic acid, glycolic acid, lactic acid, hydracrylic acid, pyruvic acid and pyrrolidonecarboxylic acid and sodium, potassium, calcium and magnesium salts of these acids, which are wrapped in the gas permeable film; a porous non-water retention sheet; and a water impermeable sheet, the porous non-water retention sheet being disposed on one side of the hygroscopic layer and the water impermeable sheet being disposed on the other side of the hygroscopic layer, to thereby sandwich the hygroscopic layer. The hygroscopic laminate controls the relative humidity in a packaged system to 20 to 40%.

L77 ANSWER 23 OF 30 USPATFULL on STN

CLM What is claimed is:

8. A skin care composition according to claim 1 wherein the humectants include pyrrolidone carboxylic acid, sodium salt sodium chloride, glycerin and urea.

PI US 5002760 19910326

AB A skin care composition to prevent premature photoaging of the skin of the user includes in addition to basic ingredients, in combination, retinol, a UV absorber and a moisturizer.

L77 ANSWER 24 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The intermediate moisture stable food composition according to claim 4, wherein the **humectant** is selected from the group consisting of **sodium chloride**, sugars, polyhydric alcohols, hydrolyzed wheys and mixtures thereof.

PI US 4990356 19910205

AB An intermediate moisture food composition including

- (a) a source of protein in an amount effective to provide a minimum protein content approximately 15% by weight including hash and/or bone-in fractions
- (b) at least one humectant in an amount effective to provide maximum water activity of approximately 0.9.

L77 ANSWER 25 OF 30 USPATFULL on STN

CLM What is claimed is:

5. The intermediate moisture stable food composition according to claim 4 wherein the humectant is selected from the group consisting of sodium chloride, sugars, polyhydric alcohols, hydrolyzed wheys and mixtures thereof.

PI US 4886679 19891212

AB An intermediate moisture food composition including

(a) a source of protein in an amount effective to provide a minimum

protein content approximately 15% by weight including hash and/or bone-in fractions

(b) at least one humectant in an amount effective to provide maximum water activity of approximately 0.9.

L77 ANSWER 26 OF 30 USPATFULL on STN

CLM What is claimed is:

- 13. A concentrate in tablet or powder form which when mixed with water provides a non-toxic solution for gold plating metallic items such as silver, copper, nickel, brass or gold alloys, or silver plated or gold plated metallic items, said tablet or powder comprising effective amounts of: (1) a water soluble gold salt as a gold generating compound selected from the group consisting of potassium tetrachloroaurate, potassium tetrabromoaurate, potassium tetraiodoaurate, sodium tetrachloroaurate, sodium tetrabromoaurate, sodium tetraiodoaurate and sodium thiosulfatoaurate; (2) a reducing compound for said gold generating compound which is selected from the group consisting of potassium sodium tartrate, potassium hydrogen tartrate and tartaric acid; (3) a polyoxyalkylene ester surfactant; (4) a humectant selected from the group consisting of diethylene glycol, dipropylene glycol and triethylene glycol; and (5) a salt as a dilutent and binder which is selected from the group consisting of sodium chloride, potassium chloride, sodium bromide, potassium bromide, sodium iodide and potassium iodide.
- 14. The concentrate of claim 13 wherein the water soluble gold salt is potassium tetrachloroaurate, the reducing compound is potassium sodium tartrate, the polyoxyalkylene ester surfactant is the addition product of 20 moles of ethylene oxide with sorbitan oleate, the humectant is dipropylene glycol and the salt is sodium chloride.

PI US 4832743 19890523

AB Non-toxic, non-electrolytic solutions, creams and immersion baths are provided for gold plating metallic items such as silver, copper, nickel, brass and gold alloys, as well as silver plated or gold plated items. Water soluble gold salts are used, together with reducing compounds. For convenience, the gold plating ingredients may be combined with salts to form tablets or powders. Addition of water to the tablets or powder provides the novel solutions and immersion baths. The amount of gold generating compound in the solutions and creams is selected to either replenish or maintain the amount of gold on an item which already has a gold surface.

L77 ANSWER 27 OF 30 USPATFULL on STN

CLM What is claimed is:

7. A translucent water-in-oil emulsion according to claims 1 or 3 wherein the humectant is selected from the group consisting of glycerine, sorbitol, polyethylene glycol, propylene glycol, polysaccharides, corn syrup, sodium pyrrolidone carboxylic acid, sodium lactate and derivatives, monosodium glutamate, polyols, urea and derivatives and natural honey.

PI US 4690774 19870901

This invention relates to novel water in oil emulsions. The emulsions of this invention are translucent water in oil emulsions comprising a water phase containing a humectant, an oil phase comprising petroleum jelly and the like and an emulsifying agent to give a water in oil emulsion; the aqueous phase having a refractive index in essentially the same range as the oil phase.

The translucent water in oil of this invention have the same general appearance and feel of petroleum jelly and function like petroleum jelly

but are superior thereto in the sense that when applied to skin will not only help prevent water from escaping therefrom or exist a barrier effect, but also, will allow water humectants and other moisturizers from the emulsion water phase to pass therethrough to contact the skin and to moisturize the skin.

The compositions of this invention are useful as skin moisturizer compositions. They may be used as a carrier or vehicle for oil and water soluble tropical drugs. They also may be used in the same general way as petrolatum (e.g. skin protectant agent, emollient, lubricant, etc.).

L77 ANSWER 28 OF 30 USPATFULL on STN

CLM What is claimed is:

12. An oral composition according to claim 11, wherein said at least one other oral composition ingredient is selected from the group consisting of another surface-active agent, a polishing agent, a humectant, a binder, a sweetner, a flavoring agent, a fluorine compound, a bactericide, an inorganic phosphate, an organic phosphate, an enzyme, an antiinflammatory agent, sodium chloride and a solvent.

PI US 4279888 19810721

AB An oral composition contains as a surface-active agent 0.1 to 5% by weight of a fatty acid ester of a sugar alcohol selected from the group consisting of lactitol, maltitol, maltotriitol, maltotetraitol, maltopentaitol, maltohexaitol, maltoheptaitol and mixtures thereof. The ester has an acyl group with 8 to 20 carbon atoms such as lauroyl. The oral composition which may be applicable as toothpaste, toothpowder, mouthwashes and the like has a pleasant taste as well as a good foaming power.

L77 ANSWER 29 OF 30 USPATFULL on STN

CLM What is claimed is:

- 4. The composition of claim 3 wherein the solar filter is an oxyethylenated paraaminobenzoic acid and the humectant is sodium lactate.
- 8. The composition of claim 3 wherein the solar filter is triethanolamine salicylate and the humectant is sodium lactate.

PI US 4217344 19800812

The present invention relates to a process for producing a dispersion of spheres comprising arranged molecular layers encapsulating an aqueous phase. The process comprises admixing a water-dispersible lipid component with the aqueous phase to be encapsulated, the liphophile/hydrophile ratio of the lipid component being such that the lipid swells in the said aqueous phase so as to form a lamellar phase. The lamellar phase is agitated and there is added thereto a dispersion liquid in an amount greater than the resulting lamellar phase and the resulting mixture is vigorously agitated for a period of time ranging from 15 minutes to 3-4 hours. The spheres can encapsulate a water-soluble pharmaceutical, a cosmetic or a food and the dispersions containing said encapsulated materials can be used particularly in the pharmaceutical and cosmetic fields.

L77 ANSWER 30 OF 30 USPATFULL on STN CLM What is claimed is:

10. A composition as defined in claim 1, wherein the humectant is a nonionic humectant selected from the group consisting of sorbitol humectants, glycerol and urea, and there is present as an electrolyte at least 0.01 parts by weight of an electrolyte selected from the group consisting of sodium chloride and calcium chloride.

PI US 3898166

19750805

AB

An antistatic composition particularly adapted for use on textiles, floor coverings, and related materials, comprising an aqueous liquid fluid medium, having a pH within the range of about 7 to 13 and containing as active ingredient an organic antistatic textile agent and from about 1 to 0.5 parts by weight of a humectant. The humectant may be either a nonionic humectant (such as glycerine) or an ionic humectant (including strong electrolytes such as calcium chloride). When the humectant is nonionic, there must also be present at least 0.01 part by weight of a strong electrolyte, i.e., the salt of a strong base and a strong acid.

L86 ANSWER 5 OF 5 USPATFULL on STN

The novel translucent water-in-oil compositions are particularly useful as skin moisturizer compositions in the treatment of dry skin. Also contemplated are their use in wound healing ointments. The translucent water-in-oil emulsions of this invention also may be used in the same general way as petroleum jelly i.e. (1) dermatalogical uses as a skin emollient and lubricant to provide a soothing, softening and protective layer, and (2) long lasting lubricant for reducing friction between different types of surfaces, including metal and most plastic materials. The compositions of this invention are in medical compositions useful as carriers or vehicles for both oil soluble and water soluble drugs and like medicinal agents.

CLM What is claimed is:

7. A translucent water-in-oil emulsion according to claims 1 or 3 wherein the humectant is selected from the group consisting of glycerine, sorbitol, polyethylene glycol, propylene glycol, polysaccharides, corn syrup, sodium pyrrolidone carboxylic acid, sodium lactate and derivatives, monosodium glutamate, polyols, urea and derivatives and natural honey.

ACCESSION NUMBER:

87:61858 USPATFULL

TITLE:
INVENTOR(S):

Novel translucent water in oil emulsions
Vishnupad, Mohan, Monroe, CT, United States

Ramirez, Jose E., Trumbull, CT, United States

PATENT ASSIGNEE(S):

Chesebrough Pond's Inc., Greenwich, CT, United States

(U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:

US 4690774 19870901

APPLICATION INFO.:

US 1985-774727

19850911 (6)

DOCUMENT TYPE: FILE SEGMENT: Utility Granted

PRIMARY EXAMINER: LEGAL REPRESENTATIVE: Lovering, Richard D. Morgan & Finnegan

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

10 1

LINE COUNT:

293

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L86 ANSWER 4 OF 5 USPATFULL on STN CLM What is claimed is:

- 4. A skin care composition according to claim 1 in the form of a skin cream, face cream, lotion, ointment or gel.
- 8. A skin care composition according to claim 1 wherein the humectants include pyrrolidone carboxylic acid, sodium salt sodium chloride, glycerin and urea.

ACCESSION NUMBER:

91:24471 USPATFULL

TITLE:

Retinol skin care composition

INVENTOR(S):

Katzev, Phillip K., 891 Jamestown Rd., East Windsor,

NJ, United States 08520

NUMBER KIND DATE
-----PATENT INFORMATION: US 5002760 19910326

APPLICATION INFO.:

US 1989-415709

19891002 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ore, D. R.
LEGAL REPRESENTATIVE: Sachs & Sachs

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM: 1 LINE COUNT: 198

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L86 ANSWER 3 OF 5 USPATFULL on STN

SUMM Some cosmetics and drugs have a formulation of an oil-in-water or a water-in-oil emulsion mainly composed of a water phase and an oil phase component such as milky lotion, cream or **ointment**.

CLM What is claimed is:

4. An oil-water mixed composition according to claim 1, wherein said humectant is selected from the group consisting of polyethylene glycol, sorbitol, maltitol, hyaluronic acid, chondroitin sulfate, erythritol, trimethyl glycin, sodium lactate, and pyrrolidonecarboxylic acid.

ACCESSION NUMBER:

1999:75256 USPATFULL

TITLE:

Oil-water mixed composition

INVENTOR(S):

Nakamura, Fumiaki, Yokohama, Japan

Abe, Koji, Yokohama, Japan Ito, Kenzo, Yokohama, Japan

PATENT ASSIGNEE(S):

Shiseido Co., Ltd., Tokyo, Japan (non-U.S. corporation)

	NUMBE	R KIND	DATE	
PATENT INFORMATION:	US 5919398 WO 9629975		19990706 19961003	
APPLICATION INFO.:	US 1997-750 .WO 1996-JP		19970416 19960310 19970416	(8) PCT 371 date
			,	PCT 102(e) date

	NUMBER	DATE		
PRIORITY INFORMATION:	JP 1995-100549	19950331 19950331		
	JP 1995-152404 JP 1995-152405	19950526 19950526		
DOCUMENT TYPE:	Utility			
FILE SEGMENT:	Granted			
PRIMARY EXAMINER:	Lovering, Richard D.			
LEGAL REPRESENTATIVE:	Snider, Ronald R.			
NUMBER OF CLAIMS:	27			
EXEMPLARY CLAIM:	1			
LINE COUNT:	1202			

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

Entries identify the native amino acid by single letter code and sequence position, followed by the replacement amino acid in the mutant. Thus, F36V Designates a human FKBP12 sequence in which phenylalanine at position 36 is replaced by valine. F36V/F99A indicates a double mutation in which phenylalanine at positions 36 and 99 are replacedby valine and alanine, respectively.

F36A	Y26V	F46A	W59A
F36V	Y26S	F48H	H87W
F36M	D37A	F48L	H87R
F36S	190A	F48A	F36V/F99A
F99A	I91A	E54A/F36V/F99G	F99G
F46H	E54K/F36M/F99A	Y26A	F46L
V55A	F36M/F99G		

[0147] Illustrative examples of ligand binding domain/ligand pairs include retinol binding protein or variants thereof and retinol or derivatives thereof; cyclophilin or variants thereof and cyclosporin or analogs thereof; FKBP or variants thereof and FK506, FK520, rapamycin, analogs thereof or synthetic FKBP ligands. In the case of a ligand binding domain comprising or derived from an immunophilin or cyclophilin, the complex of the ligand with the ligand binding domain will desirably not bind specifically to calcineurin or FRAP. A wide variety of FK506 derivatives and synthetic FKBP ligands are known which do not have observable immunosuppressive activity. Likewise, a variety of rapamycin analogs are known which bind to FKBP but are not immunosuppressive. See e.g. WO 98/02441for non-immunosuppressive rapalogs. Those and other ligands can be used as well, depending on the choice of CAD.

[0148] Ligand binding domain/ligand pairs are illustrated by FKBP DETD domains, e.g. F36M FKBP, and FKBP ligands. In general, it is preferred that the ligand bind preferentially to a mutated (i.e., having a peptide sequence not naturally occurring in the cells to be engineered) FKBP relative to wild-type FKBP. Ligands for FKBP proteins, including F36M FKBP, can comprise or be derived from a naturally occurring FKBP ligand such as rapamycin, FK506 or FK520, or a synthetic FKBP ligand, e.g. as disclosed in PCT/US95/10559; Holt, et al., J. Amer. Chem. Soc.,1993, 715, 9925-9938; Holt, et al., Biomed. Chem. Lett., 1993, 4, 315-320; Luengo, et al., Biomed. Chem. Lett., 1993, 4, 321-324; Yamashita, et al., Biomed. Chem. Lett., 1993, 4, 325-328; PCT/US94/01617; PCT/US94/08008. See also EP 0 455 427 Al; EP 0 465 426 Al; U.S. Pat. No. 5,023,26; WO 92/00278; WO 94/18317; WO 97/31898; WO 96/41865; and Van Duyne et al (1991) Science 252, 839.

CLM What is claimed is: 6. The method of claim 5 wherein the ligand binding domain binds a ligand that is or is derived from FK506, FK520, rapamycin or cyclosporin A.

17. The method of claim 16 wherein the conditional aggregation domain binds a ligand that is or is derived from FK506, FK520, rapamycin or cyclosporin A.

ACCESSION NUMBER: 2002:92274 USPATFULL

TITLE: Methods and materials for regulated production of

INVENTOR(S): Natesan, Sridaran, Chestnut Hill, MA, UNITED STATES

Clackson, Timothy P., Cambridge, MA, UNITED STATES

Pollock, Roy M., Medford, MA, UNITED STATES

PATENT ASSIGNEE(S): ARIAD Gene Therapeutics, Inc. (U.S. corporation)

NUMBER KIND DATE PATENT INFORMATION: US 2002048792 A1 20020425

DETD

APPLICATION INFO.: RELATED APPLN. INFO.:

US 2001-906189 A1 20010716 (9) Continuation of Ser. No. US 2000-488267, filed on 20 Jan 2000, ABANDONED Continuation-in-part of Ser. No. US

1998-140149, filed on 26 Aug 1998, GRANTED, Pat. No. US 6117680 Continuation-in-part of Ser. No. US 1998-126009, filed on 29 Jul 1998, ABANDONED

Continuation-in-part of Ser. No. US 1997-920610, filed

on 27 Aug 1997, GRANTED, Pat. No. US 6015709

Continuation-in-part of Ser. No. US 1997-918401, filed on 26 Aug 1997, ABANDONED Continuation-in-part of Ser. No. WO 1997-US15219, filed on 27 Aug 1997, UNKNOWN

Utility APPLICATION

FILE SEGMENT:

LEGAL REPRESENTATIVE:

ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street,

Cambridge, MA, 02139

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

DOCUMENT TYPE:

22 1

- L3 ANSWER 1 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 2003:203848 CAPLUS
- TI Usefulness of skin hydration for skin care and development of cosmetics
- AU Kohno, Yoshiyuki
- CS Material Science Research Center, Shiseido Research Center, Japan
- SO Nippon Keshohin Gijutsusha Kaishi (2002), 36(4), 253-261 CODEN: NKGKF8
- PB Nippon Keshohin Gijutsushakai
- DT Journal
- LA Japanese
- CC 62 (Essential Oils and Cosmetics)
- AΒ Maintaining suitable skin hydration is very effective for preventing dry skin. This is the most basic and important function of cosmetics. Various types of emollients and humectants are used in skincare products to prevent water loss from the skin In the stratum corneum, the importance of and retain water. natural moisturizing factor (NMF), sebum and intercellular lipids has been demonstrated. From a dermatol. approach, we have already reconstructed an analogy of the skin hydration mechanism. For dry skin, we have demonstrated the usefulness of "moisture balance;" i.e., to supply equiv. substances of water, humectants and oils in cosmetics. It is also important to develop cosmetics from a pharmacol. approach. This is very helpful in the development of new, more effective components for cosmetics. Recently we have clarified the important role of epidermal protease activity in dry skin. Inhibition of its activity accelerates intercellular repair response. We have developed trans-4-aminomethyl cyclohexane carboxylic acid (t-AMCHA), which has an anti-plasmin (a epidermal protease) activity and can cure dry skin. This article reviews the skin hydration mechanism and development of skin care cosmetics
- L3 ANSWER 2 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

utilizing dermatol. and pharmacol. approaches.

- AN 2002:622142 CAPLUS
- DN 138:308917
- TI An effective, cosmetically acceptable, novel hydro-gel emollient for the management of dry skin conditions
- AU Wynne, A.; Whitefield, M.; Dixon, A. J.; Anderson, S.
- CS The Health Centre, Dovercourt, Essex, UK
- SO Journal of Dermatological Treatment (2002), 13(2), 61-66 CODEN: JDTREY; ISSN: 0954-6634
- PB Martin Dunitz Ltd.
- DT. Journal
- LA English
- CC 62-4 (Essential Oils and Cosmetics)
- AΒ A novel hydro-gel emollient (Doublebase) has been developed with improved moisturizing effects. To test this novel hydro-gel for its moisturizing effect, for its potential to cause skin irritant/allergy and for its clin. effectiveness and acceptability in dry skin conditions. Skin hydration (corneometry) and trans-epidermal water loss (TEWL) studies with a single application in 18 volunteers confirmed its efficacy (p < 0.0001) and showed that it was superior to Ultrabase and Diprobase (p < 0.001). hydration studies with multiple applications in 12 volunteers also showed that it was superior to Ultrabase and Diprobase (p < 0.0001). Irritation tests in 74 eczema-prone patients resulted in only one mild reaction, and allergy tests in 99 healthy volunteers elicited no pos. reactions. clin. acceptability and effectiveness of Doublebase was demonstrated in an open study of 78 patients with dry skin conditions. Doublebase may be considered a suitable prepn. that can be used effectively by most patients with dry skin conditions.
- ST hydrogel moisturizer cosmetic dry skin
- IT Human

Skin

(hydrogel emollient for dry skin conditions)

IT Cosmetics (moisturizers; hydrogel emollient for dry skin conditions) IT 186708-87-2, Diprobase 509116-35-2, Doublebase 509116-53-4, Ultrabase RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hydro-gel emollient for dry skin conditions) 7732-18-5, Water, properties IT RL: PRP (Properties) (transepidermal water loss; hydro-gel emollient for dry skin conditions) RE.CNT THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD (1) Anon; J Dermatol Treat 1997, V8, PS1 (2) Bremecker, K; Die Pharmazeutische Industrie 1992, V54, P182 CAPLUS (3) Bridgett, C; Atopic skin diseases 1996, P20 (4) Comaish, J; Br J Dermatol 1976, V94, P195 MEDLINE (5) Cork, M; J Dermatol Treat 1997, V8, PS7 (6) Courage, W; Bioengineering and the skin: water and the stratum corneum 1994, P171 (7) Frodin, T; Acta Derm Venereol 1988, V68, P461 MEDLINE (8) Lochhead, R; Cosmetics and Toiletries 1986, V101(11), P125 CAPLUS (9) Lochhead, R; SCS Symposium on Gums, Polymers, Thickeners and Resins (Unpublished report) 1986 (10) Lochhead, R; Skin deep: technical bulletin on high performance polymers for personal care 1987 (11) Loden, M; Acta Derm Venereol 1995, V75, P449 MEDLINE (12) Loden, M; Br J Dermatol 1992, V126, P137 MEDLINE (13) Lucky, A; Pediatr Dermatol 1997, V14, P321 MEDLINE (14) NHS Management Executive; Eczema 1993 (15) Nilsson, G; Dissertation, Linkoping University 1977 (16) Shelanski, H; Drug and Cosmetic Industry 1953, V73, P186 (17) Stotts, J; Planning, conduct, and interpretation. Human predictive sensitisation patch tests. Current concepts in cutaneous toxicity 1980, P41 (18) Thune, P; Acta Derm Venereol 1989, suppl 144, P133 (19) Tree, S; Br J Dermatol 1975, V92, P195 MEDLINE (20) Werner, Y; Acta Derm Venereol 1985, V65, P102 MEDLINE
(21) Werner, Y; Acta Derm Venereol 1986, V66, P281 MEDLINE L3ANSWER 3 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN AN2002:485013 CAPLUS DN137:24161 ΤI Skin care composition and its use for healing damaged skin IN Kim, Hyun Joon PΑ Intercosm Biotech Laboratories Inc., S. Korea SO Ital. Appl., 35 pp. CODEN: ITXXCZ DTPatent Italian LΑ ICM A61K007-48 TC 62-4 (Essential Oils and Cosmetics) Section cross-reference(s): 63 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ----------A1 IT 1999-MI1884 19990908 IT 99MI1884 20010308 PRAI KR 1998-26753 Α 19980803 A formulation for a skin care compn. and its use for healing damaged skin is described. The compn. protects the skin's lipid constituents and the

AB A formulation for a skin care compn. and its use for healing damaged skin is described. The compn. protects the skin's lipid constituents and the structural properties of the epidermal membranes. The main components for the skin's horny layer (stratum corneum) membranes include ceramides, cholesterol, fatty acids, the main components for the endodermis include lecithin and triglycerides and an active ingredient, phytosphingosine, and its derivs. This compn. can be described as of superior performance due to its skin penetration and the obsd. improved capacity of the skin to retain water. The same compn. has the effect of reinforcing the lamella

of the stratum corneum making it function as an epidermal barrier. is a redn. in transcutaneal water loss as a result of this barrier effect, indicating excellent hydrating and emollient benefits. The skin care compn. is effective in healing damaged skin and skin care healing compn phytosphingosine Cosmetics (emollients; skin care compn. and use for healing damaged skin) Cosmetics Hydration, physiological Skin, disease (skin care compn. and use for healing damaged skin) Ceramides Fatty acids, biological studies Glycerides, biological studies Phosphatidylcholines, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (skin care compn. and use for healing damaged skin) Drug delivery systems (topical; skin care compn. and use for healing damaged skin) 57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid, 112-80-1, Oleic acid, biological studies 554-62-1, biological studies Phytosphingosine RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (skin care compn. and use for healing damaged skin) 325141-78-4P, N,N,N-Trimethyl phytosphingosine RL: COS (Cosmetic use); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (skin care compn. and use for healing damaged skin) ANSWER 4 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN 2002:206306 CAPLUS 137:283924 A comparison of the effects of bath additives on the barrier function of skin in normal volunteer subjects Hill, S.; Edwards, C. Department of Dermatology, University of Wales College of Medicine, Cardiff, UK Journal of Dermatological Treatment (2002), 13(1), 15-18 CODEN: JDTREY; ISSN: 0954-6634 Martin Dunitz Ltd. Journal English 62-4 (Essential Oils and Cosmetics) Emollients form an occlusive layer on the skin surface, reducing transepidermal water loss (TEWL), thus providing a temporary restoration of barrier function in compromised skin. This study evaluated the ability of 3 bath additives to reduce TEWL from compromised skin. The stratum corneum on areas of forearm skin was removed by the repeated application of D-Squame disks. After 1 h, baseline measurements (t = 0) of TEWL were recorded before each arm was immersed for 10 min in a warm water-bath contg. 1 of 4 treatments. The arms were air-dried for 20 min and the TEWL measurements repeated. Three further TEWL measurements were made at 30-min intervals. Measurements were made using a Tewameter in a controlled atm. There was little difference between the products in terms of changes in mean TEWL values. However, when expressed relative to t = 0 values, some differences became apparent. The mean values for sites treated with Balmandol were lower than the other sites at 60, 90, and 120 min. When analyzed by the summary statistic AUC (area under the curve), the difference between Balmandol and water and also Balmandol and Eucerin was statistically significant. These results would suggest that Balmandol

has a greater effect on barrier function (as assessed by measurement of a

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redn. in TEWL values) than Eucérin. bath prepn skin water loss fatty acid ST Bath preparations IT Human (bath additives on barrier function of skin) Cosmetics IT (emollients; bath additives on barrier function of skin) TT Alcohols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (lanolin; bath additives on barrier function of skin) IT Skin (stratum corneum; bath additives on barrier function of skin) THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 15 RE (1) Anon; Association of the British Pharmaceutical Industry 1988 (2) Anon; Clinical dermatology 3rd edn 1991, P349 (3) Cork, M; J Dermatol Treat 1997, V8(suppl 1), PS7 (4) Fenton, D; Med Dialogue 1985, V65, P2 (5) Gabard, B; J Soc Cosmet Chem 1991, V42, P299 CAPLUS (6) Grice, K; The physiology and pathophysiology of the skin 1980, V6, P2115 (7) Idson, B; J Soc Cosmet Chem 1978, V29, P573 (8) Leveque, J; J Soc Cosmet Chem 1979, V30, P333 (9) Lucky, A; Pediatr Dermatol 1997, V14, P321 MEDLINE (10) Marks, R; Principles of cosmetics for the dermatologist 1982, P334 (11) Pinnagoda, J; Contact Dermatitis 1990, V22, P164 MEDLINE (12) Serup, J; Clin Exp Dermatol 1989, V14, P227 (13) Shahidullah, M; Br J Dermatol 1969, V81, P722 MEDLINE (14) Shatz, H; J Soc Cosmet Chem 1993, V44, P53 (15) Tree, S; Br J Dermatol 1975, V92, P195 MEDLINE ANSWER 5 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN AN 2002:109701 CAPLUS DN 136:289027 TI Eumovate (clobetasone butyrate) 0.05% cream with its moisturizing emollient base has better healing properties than hydrocortisone 1% cream: A study in nickel-induced contact dermatitis ΑU Parneix-Spake, A.; Goustas, P.; Green, R. CS Aster, Paris, Fr. SO Journal of Dermatological Treatment (2001), 12(4), 191-197 CODEN: JDTREY; ISSN: 0954-6634 PΒ Martin Dunitz Ltd. DT Journal LA English CC1-12 (Pharmacology) Section cross-reference(s): 63 AΒ Background: The emollient base of a topical corticosteroid, through its moisturizing properties, can be a useful treatment adjunct. Objective: To compare the healing properties of Eumovate (clobetasone butyrate) 0.05% cream with its emollient base, hydrocortisone 1% cream and with no treatment. Methods: A single-center, doubleblind, intra-individual, comparative study that involved 18 volunteers with nickel-induced contact dermatitis. Following a pos. patch test to nickel, sub-therapeutic amts. (10 .mu.l=3 mg cm-2) of each of the treatments were applied twice daily for seven days to each of the four test sites. Results: In terms of the primary endpoint, a physician's global assessment after 7 days of treatment, clobetasone butyrate (CB) 0.05% cream showed a significantly better response than hydrocortisone (HC) 1% cream (78% vs 39%, difference -0.4, 95% CI -0.7 to -0.1; p = 0.046) or no treatment (78% vs 28%, difference -0.5, 95% CI -0.9 to -0.1; p = 0.016). CB 0.05% cream also showed a better response than its emollient base (78% vs 56%), though statistical significance was not achieved. In terms of moisturizing effects, there was no difference in transepidermal water loss (TEWL) between CB 0.05% cream and its emollient base. CB 0.05% cream treated sites did, however, have

significantly lower values (i.e. were more moisturized) than untreated sites (difference -8.5, 95% CI -12.0 to -4.86; p < 0.001) or HC 1% treated sites (difference -7.1, 95% CI -11.0 to -3.4; p < 0.001). In terms of skin blanching activity, as expected the steroid-based creams achieved lower colorimetric values than the emollient base cream. Conclusions: These results from exptl. induced skin inflammation indicate that CB 0.05% (as Eumovate 0.05% cream) has both more effective anti-inflammatory activity and better moisturizing properties than hydrocortisone 1% cream and that these effects are in part due to its efficient emollient base. antiinflammatory eumovate topical cream moisturizer emollient

ST antiinflammatory eumovate topical cream moisturizer emollient hydrocortisone dermatitis; clobetasone butyrate corticosteroid healing contact dermatitis nickel

IT Dermatitis

(contact; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Cosmetics

(creams, moisturizers; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems

(emollients; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Anti-inflammatory agents

Human

Skin preparations (pharmaceutical)

Wound healing promoters

(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Corticosteroids, biological studies

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems

(ointments, creams; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT Drug delivery systems

(topical; eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT 7440-02-0, Nickel, biological studies

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

IT 50-23-7, Hydrocortisone 25122-57-0, Clobetasone butyrate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(eumovate (clobetasone butyrate) cream with moisturizing emollient base vs. hydrocortisone cream: healing properties in nickel-induced contact dermatitis)

- RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD RE
- (1) Batt, M; Int J Cosmetic Sci 1986, V8, P253
- (2) Cork, M; The Asthma Journal 1999, V4, P116
- (3) Fullerton, A; Contact Dermatitis 1996, V35, P1 MEDLINE
- (4) Kaidbey, K; J Invest Dermatol 1974, V63, P292 CAPLUS
- (5) Marks, R; J Dermatol Treat 1997, V8, P515
- (6) Orth, D; Chemistry and function 2000, P213

```
(8) Pinnagoda, J; Contact Dermatitis 1990, V22, P164 MEDLINE
(9) Queille-Roussel, C; Skin Pharmacol 1990, V3, P248 MEDLINE
(10) Seidenari, S; Exp Dermatol 1997, V6, P75
(11) Tree, S; Br J Dermatol 1975, V92, P195 MEDLINE
(12) Werner, Y; Acta Derm Venereol 1985, V65, P102 MEDLINE
     ANSWER 6 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
1.3
ΑN
     2000:772500 CAPLUS
     133:325706
DN
     Skin-friendly absorbent articles and compositions
TΙ
     Krzysik, Duane Gerard; Otts, David Roland; Lange, Beth Anne; Nelson,
IN
     Brenda Marie
     Kimberly-Clark Worldwide, Inc., USA
PA
     PCT Int. Appl., 45 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
IC
     ICM A61L015-34
     ICS A61L015-20; A61L015-24; A61L015-48
CC
     63-8 (Pharmaceuticals)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                              APPLICATION NO.
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                                              WO 2000-US10957 20000420
PΙ
     WO 2000064501
                        A1
                              20001102
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              CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
         MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6475197
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     US 1999-382018
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     WO 2000-US10957
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AΒ
     A superior skin barrier enhancing body facing material on an absorbent
     article, can be made applying, on the outer surface of the body facing
     material, a melted lipid-enriched hydrophilic compn. comprising a
     hydrophilic solvent, a high mol. wt. polyethylene glycol, a fatty alc.
     (C14-30 or greater), humectant, an oil-in-water emulsifying
     surfactant having an HLB range greater than 7, a sterol or sterol deriv.,
     and a natural fat or oil, and thereafter resolidifying the compn. to form
     a distribution of solid compn. on the outer surface of the body facing
     material. A formulation contained glycerol 5, glyceryl stearate SE 3,
     borage oil 1, aloe 0.3, tocopherol acetate 0.3 and water qs to 100% with
     pH adjusted to 5.5 and the formulation used for treatment of absorbent
     article to promote barrier repair as measured by transepidermal
     water loss.
ST
     skin absorbent article lipid
ΙT
     Fats and Glyceridic oils, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
         (Limnanthes alba seed, maleated; skin-friendly absorbent articles)
ΙT
     Medical goods
       (absorbents; skin-friendly absorbent articles)
IT
     Fats and Glyceridic oils, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
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(7) Orth, D; Chemistry and function 2000, P213

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(apricot; skin-friendly absorbent articles)
     Fats and Glyceridic oils, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (avocado; skin-friendly absorbent articles)
IT
     Fats and Glyceridic oils, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (babassu; skin-friendly absorbent articles)
IT
     Fats and Glyceridic oils, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (borage seed; skin-friendly absorbent articles)
TΤ
     Fats and Glyceridic oils, biological studies
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (evening primrose; skin-friendly absorbent articles)
     Alcohols, biological studies
IT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (fatty; skin-friendly absorbent articles)
IT
     Cottonseed oil
     Palm kernel oil
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (hydrogenated; skin-friendly absorbent articles)
IT
     Soybean oil
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (maleated; skin-friendly absorbent articles)
IT
     Absorbents
        (medical; skin-friendly absorbent articles)
IT
     Cannabis
        (seed; skin-friendly absorbent articles)
TT
     Chamomile
     Humectants
     Surfactants
        (skin-friendly absorbent articles)
IT
     Canola oil
     Castor oil
     Coconut oil
     Corn oil
     Cottonseed oil
     Fats and Glyceridic oils, biological studies
     Fatty acids, biological studies
     Glycols, biological studies
     Palm kernel oil
     Phospholipids, biological studies
     Polyoxyalkylenes, biological studies
     Rape oil
     Sterols
     Sunflower oil
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (skin-friendly absorbent articles)
     Fats and Glyceridic oils, biological studies
ΙT
     RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological
     study); USES (Uses)
        (teaseed; skin-friendly absorbent articles)
TT
     50-70-4, Sorbitol, biological studies
                                            56-81-5, Glycerol, biological
              57-10-3, Palmitic acid, biological studies 57-11-4, Stearic
     acid, biological studies 57-55-6, Propylene glycol, biological studies
     57-88-5, Cholesterol, biological studies 60-33-3, Linoleic acid,
     biological studies
                        79-63-0, Lanosterol
                                                111-60-4, Glycol stearate
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112-53-8, Lauryl alcohol 112-72-1, Myristyl alcohol 112-92-5, Stearyl alcohol 629-96-9, Arachidyl alcohol 661-19-8, Behenyl alcohol 7732-18-5, Water, biological studies 9005-25-8D, Starch, hydrolyzates, biological studies 11099-07-3, Glyceryl stearate 25322-68-3, Peg 36653-82-4, Cetyl alcohol 56451-84-4, Sorbitan stearate RL: DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (skin-friendly absorbent articles) THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT (1) Deckner, G; US 4604281 A 1986 CAPLUS (2) Hamada, S; WO 9731620 A 1997 CAPLUS (3) Procter & Gamble; WO 9913861 A 1999 CAPLUS (4) Unilever Plc; WO 9937744 A 1999 CAPLUS (5) Upjohn Company; GB 880276 A 1961 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN 2000:699080 CAPLUS 133:271700 formulation for healing and protecting skin containing Curcuma extract, natural gum, fragrant oil, beeswax and petroleum jelly Bindra, Rattan Lal; Gupta, Rashmi; Shukla, Yogendra Nath; Dwivedi, Samresh; Kumar, Sushil Council of Scientific and Industrial Research, India U.S., 4 pp. CODEN: USXXAM -Patent English ICM A61K007-00 ICS A61K006-00; A61K007-021 424401000 63-6 (Pharmaceuticals) Section cross-reference(s): 62 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE --------------US 6126950 Ά 20001003 US 1998-58217 19980410 PRAI IN 1997-DE1715 19970624 Α A herbal formulation for the treatment of cracked heels and palms was claimed. It contains natural ext. of Curcuma (2-10 parts by wt.); natural gum selected from Acacia (gum arabic), Shorea, or colophonium (rosin) (2-20 parts by wt.); natural fragrant oils selected from basil, chamomile, or Mentha oil; natural beeswax as emulsifier, and petroleum jelly. Since the components in the formulation are from herbal sources it safe to use and eco-friendly and does not produce any harmful effects on the skin. The synergistic combination of exts. of Curcuma and natural gum allow wounds to heal quickly when applied to cracked skin. The formulation also contains a wound-healing fragrant oil. The natural wound healing herbal ext. acts as a humectant and the gum gives an synergistic effect in binding to the skin, thereby reducing water loss from the skin. The cream spreads evenly and smoothly when applied on the affected parts, and quickens healing, restores natural suppleness and softness and also serves as an antiseptic. A formulation contained beeswax 65, petroleum jelly 17, Curcuma ext. (15-18% by wt. water) 10,

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applied twice daily.

heel Curcuma gum oil beeswax petroleum jelly; palm Curcuma gum oil beeswax petroleum jelly; cracked skin Curcuma gum oil beeswax petroleum jelly; Acacia Curcuma oil beeswax petroleum jelly; Shorea Curcuma oil beeswax petroleum jelly; colophonium Curcuma oil beeswax petroleum jelly

Shorea gum 4, basil oil 2, preservative Nipagin-m 2 parts by wt., and emollient oil. This formulation was cost-effective to prep. When field-tested it was found to heal mildly cracked skin within 3 days if

ITEssential oils RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL

```
(Biological study); USES (Uses)
        (basil, Ocimum basilicum, Ocimum basilicum; formulation for healing and
        protecting skin contg. Curcuma ext., natural gum, fragrant oil, beeswax
        and petroleum jelly)
IT
     Essential oils
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (chamomile; formulation for healing and protecting skin contq. Curcuma
        ext., natural gum, fragrant oil, beeswax and petroleum jelly)
IT
     Beeswax
     Curcuma
     Foot
     Hand
     Margosa (Melia azadirachta)
     Wound healing promoters
        (formulation for healing and protecting skin contg. Curcuma ext.,
        natural gum, fragrant oil, beeswax and petroleum jelly)
TΤ
     Lanolin
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (formulation for healing and protecting skin contg. Curcuma ext.,
        natural gum, fragrant oil, beeswax and petroleum jelly)
TТ
     Petrolatum
     Rosin
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (formulation for healing and protecting skin contg. Curcuma ext.,
        natural gum, fragrant oil, beeswax and petroleum jelly)
IT
     Shorea
        (gum; formulation for healing and protecting skin contg. Curcuma ext.,
        natural gum, fragrant oil, beeswax and petroleum jelly)
IT
     Essential oils
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (mint, Mentha, Mentha; formulation for healing and protecting skin
        contg. Curcuma ext., natural gum, fragrant oil, beeswax and petroleum
        jelly)
IT
     Waxes
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (spermaceti; formulation for healing and protecting skin contq. Curcuma
        ext., natural gum, fragrant oil, beeswax and petroleum jelly)
     97-59-6, Allantoin
                         9000-01-5, Acacia gum
     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (formulation for healing and protecting skin contg. Curcuma ext.,
        natural gum, fragrant oil, beeswax and petroleum jelly)
RE.CNT
              THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) American Chemical Society; Chemical Abstracts 1959, P1959
(2) Anon; NL 6513789 1968
(3) Anon; HU 55627 1991
(4) Anon; PL 157294 1992 CAPLUS
(5) Anon; Lawless The Illustrated Encyclopedia of Essential Oils: The Complete
    Guide to the Use of Oils in Aromatherpathy and Herbalism 1995, P209
(6) Grollier; US 4569839 1986
(7) Segawa; Yakuzaigaku 1992, V52(1), P45 CAPLUS
(8) Shah; US 5693327 1997
(9) Swinyard; Remington's Pharmaceutical Sciences 1980, P773
(10) Udeinya; US 5370873 1994
(11) Wells; Cosmetics and the Skin 1967, P266
(12) Wells; Cosmetics and the Skin 1967, P301 MEDLINE
(13) Windholz; The Merck Index, 10th edition 1983, P9834
(14) Zabotto; US 4534981 1985 CAPLUS
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ANSWER 8 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
L3
AN
     1998:108646 CAPLUS
DИ
     128:196613
     Galenic and dermopharmaceutical effectiveness study of an emulsified
TI
     pharmaceutical form with retinoic acid
ΑU
     Fresno, M. J.; Jimenez, M. M.; Selles, E.
     Dep. Farmacia Tecnologia Farmaceutica, Univ. Alcala, Madrid, 28871, Spain
CS
     Drug Development and Industrial Pharmacy (1998), 24(1), 73-79
SO
     CODEN: DDIPD8; ISSN: 0363-9045
     Marcel Dekker, Inc.
PB
     Journal
DT
     English
LA
     63-6 (Pharmaceuticals)
CC
     Retinoic acid constitutes an active that is already being used extensively
ΑB
     in the fight against cutaneous aging. After a period in which certain
     scientific publications questioned its use, today there is no doubt that
     retinoic acid continues to be an active with wide possibilities of use
     when it is formulated and administered correctly. In this work we propose
     a new formulation that, on the basis of a modern self-emulsifying
     excipient, incorporates retinoic acid in its compn. The work protocol is structured in the following points of study. Rheol. assay: Shear rate,
     shear stress, viscosity, thixotropy, rheodestruction, and extensibility
     measurements were carred out. Other pharmacotech. assays: External
     appearance, interposition type, and pH control were studied.
     Dermopharmaceutical effectiveness study: Biophys. non-invasive techniques
     were applied, according to a standardized work method. The following
     considerations can be made from the results: the layout of the rheograms
     could fit, in principle, inside a non-Newtonian-shear-thinning flow
     behavior, with similar rheodestruction profiles. The hysteresis values,
     as well as the extensibility indexes that were obtained, detd. a good
     degree of applicability. From the whole of results, we could conclude
     that the formulation proposed is profiled like an emulsified
     pharmaceutical form with an excellent cosmetol. adaptation, eudermic pH,
     and soft emollient action, which prohibits the loss of
     superficial water that maintains the retinoic acid action.
ST
     retinoic acid emulsion pharmaceutical
IT
     Glycerides, biological studies
     RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical
     process); PRP (Properties); THU (Therapeutic use); BIOL (Biological
     study); PROC (Process); USES (Uses)
        (C8-10; galenic and dermopharmaceutical effectiveness study of an
        emulsified pharmaceutical form with retinoic acid)
IT
     Drug delivery systems
        (emulsions, topical; galenic and dermopharmaceutical effectiveness
        study of an emulsified pharmaceutical form with retinoic acid)
IT
     Acne
     Rheology
        (galenic and dermopharmaceutical effectiveness study of an emulsified
        pharmaceutical form with retinoic acid)
IT
     302-79-4, Retinoic acid
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PEP (Physical, engineering or chemical process); PRP
     (Properties); THU (Therapeutic use); BIOL (Biological study); PROC
     (Process); USES (Uses)
        (galenic and dermopharmaceutical effectiveness study of an emulsified
        pharmaceutical form with retinoic acid)
IT
     4080-31-3, Quaternium 15
                                36653-82-4, Cetyl alcohol
     RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical
     process); PRP (Properties); THU (Therapeutic use); BIOL (Biological
     study); PROC (Process); USES (Uses)
```

pharmaceutical form with retinoic acid)
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

(galenic and dermopharmaceutical effectiveness study of an emulsified

- (1) Anon; Formulacion Magistral, Technical Documentation 1995
- (2) Baran, R; Cosmetic Dermatology 1994, P299
- (3) Berardesca, E; Dermatol 1991, V181, P1
- (4) Castro, M; Validacion de metodos analiticos 1989, P89
- (5) Castro, M; Validacion de metodos analiticos 1989, P90
- (6) Crabajo, J; Proceedings of the 7th National Congress of Dermopharmacy 1993, P55
- (7) Del Pozo, A; Cien Ind Farm 1985, V4, P126
- (8) Fauli, C; Tratado de Farmacia Galenica 1993, P437
- (9) Garcia, C; Bim-Farma 1991, V1, P1
- (10) Laba, D; Rheological Properties of Cosmetics and Toiletries 1993, V13
- (11) Le Hir, A; Farmacia Galencia 1995, P153
- (12) Neuwald, F; J Soc Cosmet Chem 1966, V17, P213
- (13) Raab, W; Br J Dermatol 1990, V122, P37
- (14) Thorne, E; J Int Med Res 1990, V18, P18
- L3 ANSWER 9 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1997:548112 CAPLUS
- DN 127:210182
- TI Development and application of acetylhyaluronate for cosmetics
- AU Oka, Takashi; Uemura, Masaaki; Ueno, Norio; Yanaki, Toshio; Yamaguchi, Michihiro
- CS Shiseido Res. Cent., Kanagawa, 223, Japan
- SO Scientific Conference of the Asian Societies of Cosmetic Scientists, 3rd, Taipei, May 23-24, 1997 (1997), 234-245 Publisher: Asian Societies of Cosmetic Scientists, Taichung, Taiwan.

 CODEN: 64XSAZ
- DT Conference
- LA English
- CC 62-4 (Essential Oils and Cosmetics)
- To maintain healthy and fresh skin, it is necessary to moisten AB sufficiently stratum corneum. Due to aging, surroundings, phys. constitution, and other factors, the stratum corneum always has a tendency to lose its normal water content. It is effective to apply humectants to the skin for keeping the normal water content. In general, humectants, sodium hyaluronate (HA), which is made from safe biol. sources and is hardly subject to relative humidity of environment, has a very high moisturizing effect. To endow HA with precious functions, the authors synthesized varieties of HA derivs. and evaluated their usefulness for cosmetic products. After numerous investigations for finding HA derivs., the authors eventually discovered a novel HA deriv., sodium acetylhyaluronate (AcHA), which increases moisturizing effect and has a very high skin-softening effect for stratum corneum. To clarify the mechanism of the skin-softening effect, the hygroscopicity of AcHA was measured. The hygroscopicity of AcHA was equal to that of HA. However, DSC also showed that the bound water content of stratum corneum treated with AcHA was markedly greater than that of HA-treated stratum corneum. It was also found by in an vivo test that AcHA raised the water content of stratum corneum more than HA did. Apparently, AcHA could enhance the intrinsic water-holding capacity of the stratum corneum. Thus, there was an interaction between AcHA and stratum corneum and this could induce the strong skin-softening effect. To investigate this interaction, the adsorption of AcHA on human skin was measured. The amt. of adsorption of AcHA was markedly greater than that of HA. This was consistent with the fact that AcHA is an amphiphilic polymer having an effect of lowering the surface tension. Considering these results and properties, it was suggested that AcHA could be adsorbed efficiently on human skin, and this adsorption reduced the transepidermal water loss and resulted in the skin-softening effect. Upon the use of AcHA in cosmetic formulation, it as obsd. that a lotion contg. 0.2% AcHA could increase the water contents in stratum corneum, reduce the transepidermal water loss, and improve the skin condition. Although further research is necessary to demonstrate the skin-softening effect of AcHA, the

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superior effect of AcHA as a humectant was confirmed in this
ST
     acetylhyaluronate skin humectant cosmetic; hyaluronate acetyl skin
     humectant cosmetic
IT
     Elasticity
     Humectants
     Hydration, chemical
        (acetylhyaluronate for cosmetics)
IT
     Skin, disease
        (dry; acetylhyaluronate for cosmetics)
IT
     Cosmetics
        (moisturizers; acetylhyaluronate for cosmetics)
IT
        (stratum corneum; acetylhyaluronate for cosmetics)
     9067-32-7DP, Sodium hyaluronate, acetyl derivs.
IT
     RL: BUU (Biological use, unclassified); PRP (Properties); SPN (Synthetic
     preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (acetylhyaluronate for cosmetics)
IT
     9067-32-7, Sodium hyaluronate
     RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological
     study); RACT (Reactant or reagent); USES (Uses)
        (acetylhyaluronate for cosmetics)
     ANSWER 10 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
L3
     1997:385532 CAPLUS
AN
DN
     127:6207
TI
     Nonerasable ink-jet ink compositions containing a colored polyurethane
     dispersion
     Banning, Jeffery H.; Bui, Loc B.
ΙN
     Tektronix, Inc., USA
PA
     Eur. Pat. Appl., 11 pp.
SO
     CODEN: EPXXDW
DT
     Patent
LA
     English
     ICM C08G018-08
TC
     ICS C08G018-38; C09D011-00
CC
     42-12 (Coatings, Inks, and Related Products)
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                                           ______
    EP 769509
PI .
                      A2
                            19970423
                                          EP 1996-307248
                                                           19961003
    EP 769509
                      Α3
                            19971203
     EP 769509
                      B1
                           20020116
        R: DE, FR, GB, NL
    US 5700851
                      Α
                            19971223
                                          US 1995-543966
                                                            19951017
     JP 09124989
                      A2
                            19970513
                                          JP 1996-293319
                                                           19961015
PRAI US 1995-543966
                           19951017
                      Α
    Title stable ink-jet ink compn. comprises a mixt. of (1) an aq. colored
     polyurethane dispersion made from internal surfactant- and reactive
     colorant-contg. urethane prepolymer, .gtoreq.1 neutralizing agent, an aq.
    medium and .gtoreq.1 chain extender; (2) an aq. medium and (3) .gtoreq.1
                Thus, a urethane prepolymer prepd. from
    poly(tetramethylene glycol) (Terathane 2000) 66.94, a reactive colorant
    Milliken Exp Red 25.60, dimethylolpropionic acid 10.24 and IPDI 42.4 q was
    neutralized with 7.8 g triethylamine and then chain-extended with 3.4 q
    ethylene diamine to give a colored polyurethane dispersion, 20 g of which
    was mixed with plasticizer PEG 200 (polyethylene glycol) 4.32 g to give an
     ink, the printed image from which showed no noticeable smearing by wet
     finger rubbing and no noticeable color loss by running
    water washing.
ST
    nonerasable colored ink jet polyurethane compn; colorant internal
    polyurethane ink; tetramethylene glycol dimethylolpropionic acid IPDI
    polyurethane
```

IT

Inks

(jet-printing; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) Humectants IT Plasticizers (nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) IT Polyoxyalkylenes, uses RL: MOA (Modifier or additive use); USES (Uses) (plasticizer; nonerasable ink-jet ink compns. contq. colored polyurethane dispersion) ΙT Polyurethanes, uses RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-polyurea-, block; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) ΙT Polyureas RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyoxyalkylene-polyurethane-, block; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) TΤ 56-81-5, 1,2,3-Propanetriol, uses 57-55-6, 1,2-Propanediol, uses 102-71-6, uses 616-45-5, 2-Pyrrolidone RL: MOA (Modifier or additive use); USES (Uses) (humectant; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) IT 189750-64-9P 190192-88-2P RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) IT 117-81-7, Dioctyl phthalate 629-11-8, 1,6-Hexanediol 25322-68-3 RL: MOA (Modifier or additive use); USES (Uses) (plasticizer; nonerasable ink-jet ink compns. contg. colored polyurethane dispersion) ANSWER 11 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN L31996:351009 CAPLUS AN125:49217 DN TI Topical ointment therapy benefits premature infants Nopper, Amy Jo; Horii, Kimberly A.; Sookdeo-Drost, Sharon; Wang, Tung Ho; ΑŲ Mancini, Anthony J.; Lane, Alfred T. CS School Medicine, Stanford University, Stanford, CA, 94305-5334, USA SO Journal of Pediatrics (St. Louis) (1996), 128(5, Pt. 1), 660-669 CODEN: JOPDAB; ISSN: 0022-3476 PΒ Mosby-Year Book DTJournal LΑ English CC1-12 (Pharmacology) AΒ Premature infants have an ineffective epidermal barrier. The aim of this study was to investigate the cutaneous and systemic effects of preservative-free topical ointment therapy in premature infants. conducted a prospective, randomized study of 60 infants less than 33 wk' estd. gestational age. The treated infants received therapy for 2 wk with twice-daily preservative-free topical ointment therapy while the control group received no topical treatment or as-needed therapy with a water-in-oil emollient. Data collection included transepidermal water loss (TEWL) measurement, skin condition evaluations, fungal and quant. bacterial skin cultures, anal. of fluid requirements, patterns of wt. loss or gain, and the incidence of blood and cerebrospinal fluid cultures pos. for microorganisms. We found that topical ointment therapy significantly decreased TEWL during the first 6 h after the initial application. TEWL was decreased by 67% (p = 0.0001) when measured 30 min after application and 34% (p = 0.001) when measured 4 to 6 h after application. We also obsd. significantly superior skin

condition scores in the treated group on study days 7 and 14 (p = 0.001 and 0.0004, resp.). Quant. bacterial cultures revealed significantly less colonization of the axilla on day 2, 3, or 4 and on day 14 (p = 0.008 and 0.04, resp.). The incidence of pos. findings in blood and/or cerebrospinal fluid cultures was 3.3% in the treated group of infants vs. 26.7% in the control group (p = 0.02). There was no statistical difference in the fluid requirements or patterns of wt. gain or loss during the 2 wk of the study. Preservative-free topical ointment therapy decreased TEWL for 6 h after application, decreased the severity of dermatitis, and decreased bacterial colonization of axillary skin. Infants treated with ointment had fewer blood and cerebrospinal fluid cultures pos. for microorganisms. These data support the use of topical ointment therapy in very premature infants during the first weeks after birth.

- ST topical ointment newborn
- IT Newborn

(topical ointment therapy benefits premature human infants)

IT Pharmaceutical dosage forms

(topical, topical ointment therapy benefits premature human infants)

- L3 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1995:194145 CAPLUS
- DN 122:16985
- TI In vivo evaluation of the effects of moisturizers on transepidermal water loss using factorial designs
- AU McCallion, R.; Li Wan Po, A.
- CS Drug Delivery Research Group, The School of Pharmacy, Medical Biology Centre, The Queen's University of Belfast, 97 Lisburn Road, Belfast, BT9 7BL, UK
- SO International Journal of Pharmaceutics (1995), 113(2), 247-55. CODEN: IJPHDE; ISSN: 0378-5173
- PB Elsevier
- DT Journal
- LA English
- CC 63-5 (Pharmaceuticals)
- AB The effect of topical applications of pyrrolidone carboxylic acid (PCA), sodium lactate (NaL) and urea on in vivo transepidermal water loss (TEWL) in healthy volunteers was studied. The moisturizing compds. were applied both singly and as mixts. using a 22 factorial design. It is shown that all three compds. increased TEWL and that moreover, urea and PCA exerted synergism. No such interaction was obsd. between urea and sodium lactate. The study provides a rational basis for the co-formulation of urea and PCA in moisturizing products for topical use.
- ST moisturizer transepidermal water factorial design; emollient humectant transepidermal water
- IT Humectants

Hydration, biological

Skin

Statistics and Statistical analysis

(factorial designs in study of moisturizers effect on transepidermal water loss)

IT Pharmaceutical dosage forms

(emollients, factorial designs in study of moisturizers effect on transepidermal water loss)

IT 57-13-6, Urea, biological studies 72-17-3, Sodium lactate 98-79-3,
 Pyrrolidone carboxylic acid

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(factorial designs in study of moisturizers effect on transepidermal water loss)

(factorial designs in study of moisturizers effect on transepidermal water loss)

IT 57-55-6, Propylene glycol, biological studies

RL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(moisturizer vehicle; factorial designs in study of moisturizers effect on transepidermal water loss)

- L3 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
- AN 1990:609038 CAPLUS
- DN 113:209038
- TI Development of a stratum corneum lipid model to study the cutaneous moisture barrier properties
- AU Rhein, Linda D.; Simion, F. Anthony; Froebe, Claudia; Mattai, Jairajh; Cagan, Robert H.
- CS Colgate-Palmolive Co., Piscataway, NJ, 08854, USA
- SO Colloids and Surfaces (1990), 48(1-3), 1-11 CODEN: COSUD3; ISSN: 0166-6622
- DT Journal
- LA English
- CC 13-7 (Mammalian Biochemistry) Section cross-reference(s): 62
- A skin lipid model to study barrier properties of stratum corneum has been developed. Research that led to the evolution of this model is presented along with highlights of recent findings. At the normal water content of skin, the model lipid exists as a liq. crystal with only a small amt. of solid crystals present. As the water content is reduced, for example by exposure to a low-humidity environment, more of the solid crystal phase is Further x-ray diffraction studies identified the location of specific lipids in the model layered structure. Triglycerides and squalene are found in the hydrophobic Me layer, whereas fatty acids, cholesterol, and ceramides are located between the fatty acid chains. Water uptake was significantly enhanced when extd. stratum corneum lipids or model lipids were combined with the delipidated corneccytes, compared with water uptake of the lipids or delipidated corneocytes alone. Water uptake of the combined system was similar to that of isolated, intact stratum corneum. The effect of glycerol, a well known skin moisturizer, on the model was detd. Although glycerol did not alter the water loss of the model at low relative humidity (6% relative humidity (RH)), it maintained the liq. cryst. state of the lipid at the extreme condition; in the absence of glycerol the model showed substantial crystn. and exhibited multiple phases at 6% RH. Glycerol did not exhibit humectant behavior under these conditions. This study suggests that an alternate mechanism for moisturization may be to maintain the liq. cryst. structure under dry environmental conditions.
- ST stratum corneum moisture barrier model; skin stratum corneum hydration model; lipid stratum corneum hydration model
- IT Lipids, biological studies
 - RL: BIOL (Biological study)

(as skin moisture barrier model, glycerol effect on)

- IT Hydration, biological
 - (by glycerol, of skin stratum corneum lipid model, moisture barrier in relation to)
- IT Cosmetics
- IT Skin
 - (stratum corneum, lipid model for, glycerol effect on, moisture barrier properties in relation to)
- IT 56-81-5, Glycerol, biological studies
 - RL: BIOL (Biological study)
 - (skin hydration induction by, lipid model for)
- L3 ANSWER 14 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN

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1986:444704 CAPLUS
AΝ
    105:44704
DN
    Bulky cellulosic yarn
TI
    Andreicovici, Gheorghe; Eugenia, Margarit; Amza, Maria; Ceamur, Maria
IN
    Institutul de Cercetari Textile, Rom.
PA
    Rom., 3 pp.
SO
     CODEN: RUXXA3
DT
    Patent
    Romanian
LA
IC
    D02J001-102
CC
    40-7 (Textiles)
FAN.CNT 1
                     KIND DATE
                                          APPLICATION NO. DATE
     PATENT NO.
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                           _____
                                          ______
                     B1
                                         RO 1982-108234
                                                          19820723
PΙ
     RO 85273
                           19850629
PRAI RO 1982-108234
                           19820723
     Knitted tubes of cellulosic yarn are impregnated with HCHO-glyoxal-urea
     precondensate (I), crosslinking catalysts, polyolefin softeners,
     ethoxylated fatty alc. humectants, and optionally, HCHO-melamine
     precondensate (II), crosslinked at 100-150.degree., and deknitted to give
     title yarns. This method provides for fast crosslinking of the resins.
     Thus, immersing knitted 175 g/m2 tubes (diam. 9-10 cm) of 330 dtex rayon
     yarn in a bath contg. I 150-250, II 50-80, aq. polypropylene dispersion
     softener 50-80, NH4H2PO4 catalyst 6-10, and ethoxylated fatty alc.
     humectant 2 g/L, squeezing 80% at 8-12 m/min, drying at
     100.degree., heating 3 min at 150.degree., and drying the tubes gave bulky
     yarn with resin content 4.5-4.6%, crosslinking degree 95%, strength
     loss due to resin treatment 20-24%, and boiling-water
     -induced shrinkage 40.5%. Knitting this yarn gave rippled, soft, bulky
     fabric with shrinkages -10 to -6 and 5-9% in the longitudinal and
     transverse directions, resp., during laundering.
     rayon bulky yarn; urea glyoxal resin impregnation rayon; melamine resin
ST
     impregnation rayon; polypropylene softener rayon bulky yarn; softener
     polyolefin rayon bulky yarn; catalyst crosslinking ammonium phosphate
     aminoplast; ethoxylated fatty alc humectant rayon; crosslinking aminoplast
     impregnated rayon yarn
IT
     Crosslinking catalysts
        (ammonium dihydrogen phosphate and citric acid-magnesium chloride, for
        aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of bulky
       yarn)
IT
     Rayon, preparation
     RL: PREP (Preparation)
        (bulky yarn, manuf. of, crosslinking of aminoplast-impregnated knitted
        tubes in)
IT
    Humectants
        (ethoxylated fatty alcs., for rayon bulky yarn)
IT
    Crosslinking
        (of aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of
      bulky yarn)
IT
    Softening agents
        (polyolefins, for rayon bulky yarn)
IT
     7786-30-3, uses and miscellaneous
     RL: CAT (Catalyst use); USES (Uses)
        (catalysts, contg. citric acid, for crosslinking of
        aminoplast-impregnated tubes of rayon yarn, in manuf. of bulky yarn)
IT
     77-92-9, uses and miscellaneous
     RL: CAT (Catalyst use); USES (Uses)
        (catalysts, contg. magnesium chloride, for crosslinking of
       aminoplast-impregnated knitted tubes of rayon yarn, in manuf. of bulky
       yarn)
IΤ
    7722-76-1
     RL: CAT (Catalyst use); USES (Uses)
        (catalysts, for crosslinking of aminoplasts in knitted tubes of rayon
       yarn, in manuf. of bulky yarn)
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9002-92-0
                 25322-68-3D, fatty ethers
TΤ
     RL: USES (Uses)
        (humectants, for rayon bulky yarn)
     9003-08-1 27013-01-0
IT
     RL: USES (Uses)
        (impregnation of knitted tubes of rayon yarn, in manuf. of bulky yarns)
     9002-88-4 9003-07-0
TT
     RL: USES (Uses)
        (softeners, for rayon bulky yarn)
     ANSWER 15 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
L3
AN
     1983:95484 CAPLUS
     98:95484
DN
     Determination of the humectant capacity of some substances used in
TΙ
     toothpaste production
ΑU
     Tolev, R.; Bogoslovova, I.; Boyanova, V.
CS
     Trudove na Nauchnoizsledovatelskiya Khimikofarmatsevtichen Institut
SO
     (1982), 12, 163-70
     CODEN: TKZGAG; ISSN: 0371-8972
DT
     Journal
LA
     Bulgarian.
CC
     62-7 (Essential Oils and Cosmetics)
AΒ
     The rate of water loss from 10g of solns. of several
     humectants at 51.degree. decreased in the series PEG 400
     [25322-68-3] > xylitol [87-99-0] > sorbitol [50-70-4] > PEG 200 > PEG 300 > glycerol [56-81-5] > propylene glycol [57-55-6]. Substances with
     high water retention are necessary components of high-quality toothpastes.
ST
     humectant capacity toothpaste polyol
ΙT
     Dentifrices
        (polyols for, humectant capacity of)
     Humectants
IT
        (polyols, for toothpastes)
TT
     Alcohols, biological studies
     RL: BIOL (Biological study)
        (polyhydric, for toothpaste, humectant capacity of)
     50-70-4, biological studies 56-81-5, biological studies
                         87-99-0
                                   25322-68-3
     biological studies
     RL: BIOL (Biological study)
        (for toothpaste, humectant capacity of)
     7732-18-5, biological studies
TΤ
     RL: PRP (Properties)
        (loss of, from toothpaste humectants)
L3
     ANSWER 16 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN
AN
     1982:583901 CAPLUS
DN
     97:183901
TI
     Liquid dye preparations
·IN
     Agarwal, Suresh C.; Jaeger, Horst; Podder, Nitya Gopal; Mollet, Hans
PΑ
     Ciba-Geigy A.-G. , Switz.
SO
     Eur. Pat. Appl., 26 pp.
     CODEN: EPXXDW
DT
     Patent
LΑ
     German
IC
     C09B067-46; C09D011-00; D06P001-642
CC
     40-6 (Textiles)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                            APPLICATION NO. DATE
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ΡI
     EP 56991
                       A2
                             19820804
                                            EP 1982-100444
                                                              19820122
     EP 56991
                       Α3
                             19821124
     EP 56991
                           19850327
                      ₿1
        R: BE, CH, DE, FR, GB, IT, NL
     US 4411668
                      A
                            19831025
                                            US 1982-340685
                                                              19820120
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19820904 JP 57143362 JP 1982-9641 19820126 PRAI CH 1981-473 19810126 AB Aq. dye or optical brightener prepns. with good redispersibility after partial or complete loss of water by evapn. comprise a dye with low or no soly. in water, a dispersing agent, a humectant of general structure RR1NCH2CH(OH)CH2OH (R = C1-16 alkyl optionally substituted with OH, CN, halogen, or di-C1-4 alkylamino; R1 = H or CH2CH(OH)CH2OH), and other optional additives. The compns. are used to prep. aq. or aq.-org. dyebaths, printing inks, or printing pastes. For example, a mixt. of 1-amino-4-hydroxy-2-phenoxyanthraquinone [17418-58-5] 45.4, 20:80 propylene oxide-ethylene oxide block copolymer (I) 2, ligninsulfonate 0.1, H2O 18.5, and BuN[CH2CH(OH)CH2OH]2 (II) [65838-95-1] 10 g was milled to 1 .mu.m particle size and mixed with I 3, H2O 10, and formalin 0.7 g to give a compn. for transfer printing on polyester fabrics. This compn. (1 g) was allowed to stand in a beaker for 72 h at 24-27.degree. and 40-50% relative humidity then mixed with 100 mL H2O to give an easily filterable dispersion which left no residue on the filter paper. When II was replaced by 10 g propylene glycol the compn. could not be redispersed or filtered. ST dye aq dispersion redispersible; disperse dye aq compn redispersible; redispersibility aq dye compn; humectant aq dye compn; aminopropylene glycol humectant; iminodipropanediol humectant; propylene glycol amino humectant; fluorescent brightener compn redispersible IT Humectants (aminopropanediol derivs., aq. dye and fluorescent brightener dispersions contg., with improved redispersibility) ITFluorescent brighteners (aq. dispersions of, with improved redispersibility, humectants for) ΙT (of polyester fabric, aq. disperse dye compns. for, with improved redispersibility) ITTextile printing (on polyester, aq. disperse dye compns. for, with improved redispersibility) ITDyes (disperse, aq. prepns. contg., with improved redispersibility, humectants for) ITAlcohols, uses and miscellaneous RL: USES (Uses) (polyhydric, amino, humectants, aq. dye dispersion contq., with improved redispersibility) IT(vat, aq. dispersions of, with improved redispersibility, humectants IT1594-08-7 1833-72-3 2379-79-5 2475-44-7 4395-65-7 10572-60-8 13001-39-3 17418-58-5 26311-09-1 70210-08-1 32568-48-2 RL: PROC (Process) (aq. dispersions of, with improved redispersibility, humectants for) ΙT 65838-95-1 83524-69-0 83524-70-3 83524-71-4 83524-72-5 RL: USES (Uses) (humectants, aq. dye dispersions contg., with improved redispersibility) L3 ANSWER 17 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN AN1980:99421 CAPLUS DN 92:99421 Study on the occlusivity of oil films ΤI Tsutsumi, Hisao; Utsugi, Toshiaki; Hayashi, Shizuo ΑU CS Tokyo Res. Lab., Kao Soap Co., Ltd., Tokyo, 131, Japan SO Journal of the Society of Cosmetic Chemists (1979), 30(6), 345-56 CODEN: JSCCA5; ISSN: 0037-9832 DT Journal LA English CC 62-1 (Essential Oils and Cosmetics)

The occlusivity of oils were detd. in vivo by measuring the suppression of transepidermal water loss (TEWL) of the skin. Various emollients were applied to human skin in various forms, including powder, soln. an emulsion of different types having different size distributions, and the residual states of the oil films on the skin surface were examd. with time. In order to discuss the occlusivity in relation to the individual skin conditions, the surface temp. of the skin and casual lipid level were also detd. in each subject. The occlusivity of the oil films varied with time, type of oils, their coating amt., phys. forms, emulsion type and droplet diam. of the emulsion; and the occlusive effect of oils also depended upon the characteristics of the skin such as casual lipid level and TEWL. These results could be explained by the differences in uniformity, spreadability and porosity of the oil films on the skin surface in the residual state. It is believed that the emolliency of the oil can be influenced by these differences. ST occlusivity oil film cosmetic ITParaffin oils Paraffin waxes and Hydrocarbon waxes, biological studies Petrolatum RL: BIOL (Biological study) (cosmetic oil film of, skin occlusivity of) ΙT Cosmetics (oil films of, skin occlusivity of) IT Skin, metabolism (transepidermal water loss of, oil films effect on) ANSWER 18 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN L3 . AN1972:158213 CAPLUS DN 76:158213 ΤI Humectants versus moistruizers Jacobi, Otto K. AU Kolmar Res. Cent., Wiesbaden, Fed. Rep. Ger. CS Soap, Perfumery & Cosmetics (1972), 45(2), 111-12 SO CODEN: SPCOAH; ISSN: 0037-749X DTJournal LA English CC 62 (Essential Oils and Cosmetics) Humectants are considered to be tech. components of cosmetics which prevent water loss from the cosmetics, while moisturizers are specific active additives to impart or restore moisture to the skin. ST moisturizer cosmetic; humectant cosmetic; cosmetic humectant moisturizer IT Cosmetics (humectants and moisturizers in) IT Humectants (in cosmetics, moisturizers in relation to) L3 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2003 ACS on STN AN 1959:31011 CAPLUS DN 53:31011 OREF 53:5595h-i Humectants in cosmetic emulsions TIΑU Henney, Gerald C.; Evanson, R. V.; Sperandio, Glen J. St. Louis Coll. of Pharm. and Allied Sci., St. Louis, MO CS Journal of the Society of Cosmetic Chemists (1958), 9, 329-36 SO CODEN: JSCCA5; ISSN: 0037-9832 Journal DTLAUnavailable CC 17 (Pharmaceuticals, Cosmetics, and Perfumes) A study has been made of the rate of water loss from standard vanishing creams in which glycerol, sorbitol, propylene glycol, polyethylene glycol 400 and 1,3-butylene glycol were incorporated at levels of 5 to 25%. This water loss is a function of the concn. of humectant used and the relative humidity of the

air. No humectant studied was most effective at both low and high relative humidities.

IT Humectants

(for cosmetics)

IT Cosmetics

(humectants for)

IT 57-55-6, 1,2-Propanediol

(as humectant)

IT 50-70-4, Sorbitol 56-81-5, Glycerol 107-88-0, 1,3-Butanediol 25322-68-3, Polyethylene glycol

(as humectant in cosmetic emulsions)

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ANSWER 19 OF 24 CAPLUS COPYRIGHT 2003 ACS on STN
1.5
     1993:87400 CAPLUS
AN
     118:87400
DN
     Silicone-containing water-in-oil microemulsions having increased salt
TT
     content
     Guthauser, Bernadette
IN
     Revlon Consumer Products Corp., USA
PA
     U.S., 5 pp.
SO
     CODEN: USXXAM
     Patent
DT
     English
LA.
     A01N025-04; A61K007-107; A61K007-32; B01J013-00
IC
NCL
     514785000
     62-4 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
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                                          ______
                                          US 1990-511704
     US 5162378
PΙ
                      Α
                            19921110
                                                           19900420
PRAI US 1990-511704
                            19900420
     The microemulsions contain a cetyl dimethicone copolyol 8-20, a silicone
     10-35, an org. alc. 5-15, a salt 8-20, a humectant 1-20, and
     water 20-40%. A moisturizing compn. contained urea 13.0, Abil B-9806
     10.0, cyclomethicone 25.0, MgSO4 13.0, water 22.9, propylene
     glycol 3.0, MgCl2 2.0, alc. SD-40 11.0, and citric acid 0.1%.
ST
     emulsion cosmetic cetyl dimethicone copolyol; salt silicone alc emulsion
     cosmetic
IT
     Salts, biological studies
     Siloxanes and Silicones, biological studies
     RL: BIOL (Biological study)
        (cosmetic moisturizer emulsion contg.)
     Siloxanes and Silicones, biological studies
IT
     RL: BIOL (Biological study)
        (di-Me, cosmetic moisturizer emulsion contg.)
IT
     Cosmetics
        (moisturizers, emulsions, cetyl dimethicone copolyol and salt and alc.
        and silicone in).
IT
     Salts, uses
     RL: BIOL (Biological study)
        (org., cosmetic moisturizer emulsion contq.)
IT
              57-55-6, 1,2-Propanediol, biological studies
                                                             62-76-0, Sodium
     oxalate 67-63-0, 2-Propanol, biological studies 68-04-2, Sodium
              72-17-3, Sodium lactate 127-09-3, Sodium acetate
     citrate
     137-40-6, Sodium propionate 139-02-6, Sodium phenate 142-03-0
     142-47-2, Sodium glutamate 527-07-1, Sodium gluconate toluenesulfonate 814-71-1, Calcium thioglycolate 868
                                                             657-84-1, Sodium
                                                        868-14-4, Potassium
     bitartrate
                870-72-4 877-24-7, Potassium biphthalate 1115-63-5,
     Potassium aspartate
                         1327-41-9, Aluminum chlorohydrate
                                                              1561-99-5
     1984-06-1, Sodium caprylate 2244-21-5 3555-47-3
                                                         4075-81-4, Calcium
                                                5793-88-4 6028-57-5,
     propionate
                4316-73-8, Sodium sarcosinate
                                    7446-70-0, Aluminum chloride (AlCl3),
     Aluminum caprylate 6485-34-3
     biological studies
                         7487-88-9, Magnesium sulfate, biological studies
     7632-05-5
                7647-14-5, Sodium chloride, biological
     studies
              7772-98-7, Sodium thiosulfate 7786-30-3, Magnesium chloride,
     biological studies
                         9007-48-1, Polyglyceryl-3 oleate
                                                           10043-52-4,
     Calcium chloride, biological studies 13682-92-3 16106-44-8, Potassium
     toluenesulfonate 18748-98-6 18917-91-4, Aluminum lactate
                                                                  18917-93-6,
     Magnesium lactate
                        18962-61-3, Magnesium aspartate
                                                          19544-65-1
     24634-61-5, Potassium sorbate 31142-56-0, Aluminum citrate
                                                                   34316-64-8,
     Hexyl laurate 34452-51-2, Potassium thioglycolate 60168-81-2, Sodium
     dihydroxyglycinate 61116-08-3, SD Alcohol 40
                                                    61848-87-1 64539-73-7
     67990-17-4
                83138-62-9
                             134910-86-4, Aluminum Zirconium
     Tetrachlorohydrex Gly
     RL: BIOL (Biological study)
        (cosmetic moi
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